Evidence Gathering Questionnaire for the Fitness Check of the Nature Directives

Introduction

As part of its Regulatory Fitness and Performance Programme (REFIT), the European Commission is undertaking a Fitness Check of the EU nature legislation, the Birds Directive[1] and the Habitats Directive[2] ('the Nature Directives'),[3] which will involve a comprehensive assessment of whether the current regulatory framework is "fit for purpose".

Adopted in 1979, the Birds Directive relates to the conservation of all wild birds, their eggs, nests and their habitats across the EU. Its strategic objective is 'to maintain the population of all species of wild birds in the EU at a level which corresponds to ecological, scientific and cultural requirements, while taking account of economic and recreational requirements, or to adapt the population of these species to that level'.

The Habitats Directive, adopted in 1992, covers around 1000 other rare, threatened or endemic species of wild animals and plants and some 230 habitat types. These are collectively referred to as habitats and species of Community interest. The strategic objective of the Habitats Directive is "to maintain or restore natural habitats and species of Community interest at favourable conservation status, taking into account economic, social and cultural requirements and regional and local characteristics".

The Directives require Member States to take a variety of measures to achieve these objectives. These measures include the designation of protected areas for birds (Special Protection Areas) and for habitats and species of Community interest (Special Areas of Conservation), which together comprise the Natura 2000 network, and the adoption of strict systems of species protection (see objectives of the Directives in Annex I to this document).

The Fitness Check is intended to evaluate how the Nature Directives have performed in relation to the achievement of the objectives for which they were designed. In accordance with its mandate,[4] adopted by the European Commission in February 2014, it will assess the effectiveness, efficiency, coherence, relevance and EU added value of the Nature Directives[5].

As part of this process, the European Commission has commissioned an evaluation study to support the Fitness Check. The study is tasked with gathering and analysing evidence and data held by a wide range of stakeholders.

The Questionnaire presented below is a key tool to enable you to provide this evidence.

In parallel to this questionnaire, you are invited to contribute to the initial list of published and peer-reviewed documents identified as being relevant for the Fitness Check. The list, which will be updated at regular intervals, is structured according to the evaluation categories set out in the mandate. It can be accessed at:
http://ec.europa.eu/environment/nature/legislation/fitness_check/index_en.htm

The European Commission will also launch an online public consultation for 12 weeks from April to June 2015. You are welcome to fill in that survey as well, but please be aware that the two exercises are of a different nature. The public consultation will collect views and opinions, whereas the questionnaire presented below aims to collect evidence, meaning facts or information (such as case studies, research findings, infringement cases, case law and data) which support a point or position.

The questionnaire

The questionnaire has been prepared in order to gather evidence-based information for the evaluation. It is being sent out to all Member States and selected key stakeholders across the EU.

1 Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (OJ L 20, 26.1.2010, p. 7-25.

2 Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (OJ L 206, 22.7.1992, p. 7-50).

3 Please note that for the purposes of this questionnaire, the terms 'EU nature legislation' and 'Nature Directives' refer to the Birds Directive and the Habitats Directive.

4 http://ec.europa.eu/smart-regulation/evaluation/docs/mandate_for_nature_legislation_en.pdf

5 For more information see: http://ec.europa.eu/environment/nature/legislation/fitness_check/index_en.htm

Please answer all questions that you consider **relevant to the situation in your country/region/sector/area of activity, based on direct experience supported by evidence. You are not expected or obliged to answer all questions.**

Where possible, quantitative evidence should be provided. Where this is not possible, semi-quantitative or qualitative evidence would be welcome.

We would encourage you to answer in English. In your answers please specify why and how the evidence and documents provided is relevant for the specific question. For documents that are not in English, please provide in the answer to the question a brief summary in English that explains its relevance to the question.

Please **provide full reference details for all documents cited or referred to** in your answers: author / editor names and their initials, full titles, full names of journals, relevant page numbers, publishers and place of publication. If the document is available online, please add a URL link. If it is unpublished information, please supply a copy or relevant excerpt. When citing in short a document for which you have already provided full reference details, please ensure that we can distinguish between references that have the same author(s) and year of publication.

Please, make sure that the link between a question and the document related to it is clear. You may choose to provide the full reference of cited documents in footnotes or in notes numbered and linked to a reference list at the end of the questionnaire. If you send documents as attachments to the email, please give them a name that includes the number of the question(s) they are related to.

Deadlines for submission of the questionnaire

We kindly ask you to fill in the questionnaire and return it by e-mail **within 5 weeks** of receiving it to: info.NatureDirectivesFitnessCheck@milieu.be.

We appreciate that it may not be possible to provide complete answers to all the questions and collect all the evidence you may wish to provide within this timeframe. However, it is essential that we receive an initial response which is as complete as possible within 5 weeks in order to enable us comply with the tight evaluation schedule.

On the basis of the initial responses received, follow-up interviews may be organised to seek clarification or additional information if required. It may not be possible to organise such interviews for responses received after the 5 week deadline. However, you will have until the end of April to complete your final submission in response to the questionnaire. Please note that it will not be possible to take into account contributions received after that deadline.

The evidence gathered through this questionnaire will be vital to the overall process. For this reason, **if you anticipate that you will not be able to complete the questionnaire, please let us know as soon as possible.**

Thank you in advance for your contribution.

QUESTIONNAIRE

A. General Information

Please answer ALL questions in this table

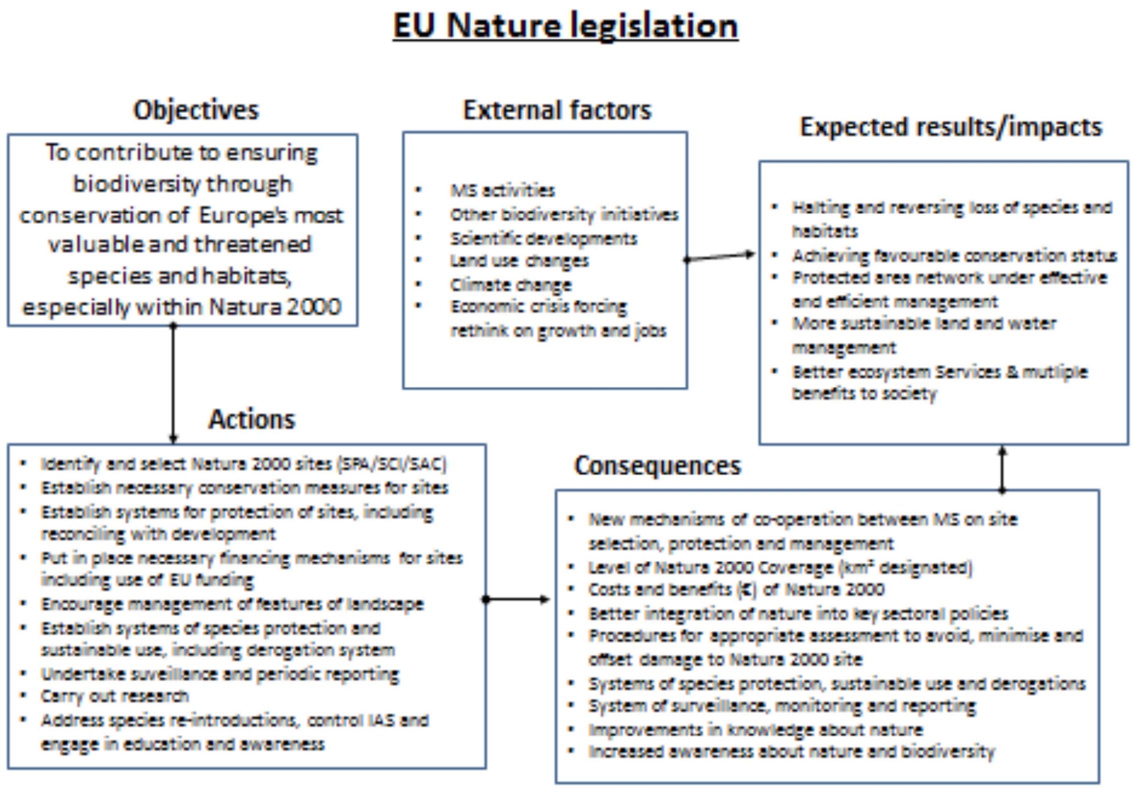
	Answer
Organisation:	**Ministry of Economic Affairs**
Date:	15-05-2015
Country (and, if applicable, region) **represented:**	Netherlands
Organisation(s) represented:	Ministry of Economic Affairs, Ministry of Infrastructure & Environment and the Association of the Provinces of the Netherlands (IPO)
Name of contact for enquires (including follow-up interview if required):	Herman Snijders
Contact email address:	h.snijders@minez.nl
Contact telephone number:	+31 (0)6 29012571
Languages spoken fluently by contact person:	Dutch, English
Language for the interview if it is not possible to conduct it in English	-
Type of organisations you represent: EU authority or agency / Member State authority or agency / business or industry / educational or scientific institute / nature conservation charity / recreation / individual expert / other (please specify).	Member State authority
Sector represented: environment / water / agriculture / forestry / fisheries / transport / energy / extractive industry / industry / housing and other buildings / recreation & tourism / science & education / other (please specify)	-
Additional comments:	Please note the following: Two appendices are send separately from this document: 1) The draft Reference list and 2) Some further background information for questions R.4/5

B. EVALUATION / FITNESS CHECK questions

Please answer all questions that are relevant to you and for which you can provide informed insights from direct experience and/or supporting evidence.

We would kindly ask that you keep your answers as succinct as possible. They should summarise in **no more than 2 pages** any evidence relevant to a given question. More complete/detailed information, if any, should be provided in the form of references and/or web links. Definitions, explanations and examples are provided under each question to assist you in answering them.

When answering the questions, please note that the Fitness Check intends to examine the performance of the Nature Directives in relation to their stated objectives, taking into account expected results, impacts and external factors. The figure below presents the intervention logic as included in the mandate. For ease of reference, a table presenting the objectives of the Directives, differentiating between different types of objectives (strategic, specific, operational), is included in Annex I to this document.



The questions are structured around the five evaluation criteria addressed in the mandate: effectiveness = S, efficiency = Y, coherence = C, relevance = R, and EU added value = AV.

Effectiveness

This section focuses on assessing the extent to which the objectives of the Birds Directive and Habitats Directive have been met, and any significant factors which may have contributed to or inhibited progress towards meeting those objectives. By 'objectives', we refer not only to the strategic objectives, but also to other specific or operational objectives required under other articles of both Directives (as set out in Annex I to this questionnaire).

'Factors contributing to or inhibiting progress' can relate to the Nature Directives themselves (e.g. the clarity of definitions) or be external factors such as lack of political will, resource limitations, lack of cooperation of other actors, lack of scientific knowledge, or other external factors (e.g. see those listed in the above intervention logic).

We are particularly keen to learn of evidence that is not included in the Member State implementation reports[6].

S.1.1 What progress have Member States made over time towards achieving the objectives set out in the Directives and related policy documents?

Please provide evidence on what progress has or is being made towards the achievement of the objectives set out in Annex I that are of relevance to you. Please address separately the objectives of the Birds Directive and the Habitats Directive, and specify which objective(s) you are referring to, with references to the corresponding Articles. If possible quantify the progress that is being made.

Answer:

Strategic objectives: to maintain (or restore) natural habitats and population of species
With respect to the strategic objectives, the following progress has been made:
Every two years the Netherlands Environment Assessment Agency (PBL) publishes report entitled “A State of the Environment” (“Balans van de Leefomgeving”) which tracks the progress made to meet the international (CBD) and EU (BHD) biodiversity goals. In 2010, the PBL[7] reported for the first time that the decline in biodiversity had slowed down on average. In 2014, the PBL[8] reported that the decline has been stopped, on average. However, the PBL also concluded that three quarters of the habitats and species protected by the BHD are still in an unfavourable state of conservation.
The reports drawn up under article 12 of the Birds Directive and article 17 of the Habitats Directive present information about all species and habitat types. These reports reveal that, overall, the number of species that are showing a positive trend (and/or already have a favourable conservation status) is fairly equal to the number of species in a stable or negative trend (in unfavourable conservation status). However, this information does not offer conclusive findings on individual species. It is possible that rare species are still declining and are still at (greater) risk of extinction, and that only already common species are increasing.
For habitat types, in general, the situation is worse. The response time for habitat types is long, which is reflected by the high rate of unfavourable-stable conservation status (instead of unfavourable increasing).

Table S1: Reported trends under art 12 BD and art 17 HD reports

	breeding birds	non-breeding birds	species HD	habitat types
CS Favourable	x	x	18	2
Increasing	58	30	31	5
Stable	18	4	11	24
Decreasing	49	12	11	14
Fluctuating	0	1	x	x
Trend unknown	4	1	5	7

[6] Habitats Directive Reports: http://bd.eionet.europa.eu/activities/Reporting/Article_17/Reports_2013/ Birds Directive Reports: http://bd.eionet.europa.eu/activities/Reporting/Article_12/Reports_2013/
[7] Planbureau voor de Leefomgeving (PBL): Balans van de Leefomgeving 2010, ISBN: 978-90-78645-46-7; PBL publication nr. 5000206001; page 194
[8] Planbureau voor de Leefomgeving (PBL): Balans van de Leefomgeving 2014, ISBN: 978-94-91506-78-9; PBL publication nr. 1308; page 78

CS unknown	x	x	3	0
total	129	48	79	52

Specific objectives – site protection and management system (art. 4, 6 (1,2), 10 HD; art.3 BD)
For the building of the network of protected areas and the ensuring of their protection, management and coherence the following progress has been made:

The following progress has been made in building the network of protected areas and ensuring their protection, management and coherence:

Selection and designation of sites:
- The building of the SPA network in the Netherlands started in 1986, and was largely completed in 2000, when the (terrestrial) network extended to 79 sites.
- In the framework of the Habitats Directive 141 (terrestrial and near shore), sites were designated as SCI in 2004 for 51 Annex I habitat types and 35 Annex II species, which are included on the Atlantic region reference list. In addition, three offshore sites were proposed and accepted as SCI (Doggersbank, Klaverbank, and Vlakte van de Raan) in 2008. This also added 1 habitat type.
- Protection for all Natura 2000 sites is laid down in the 1998 Nature Act (2005)[9]. All relevant articles of the BD and HD have been incorporated into this Act[10]. The formal process for designating both SACs and existing SPAs under the Nature Act started in 2007, for the marine sites this was in 2014.
- In the (public) process of designation under this national law, some sites were merged and others were split, and borders of SAC and SPA were harmonised. There are now 78 SPAs and 138 SCIs/SACs, which together form 160 Natura 2000 sites.
- Of these 160 Natura 2000 sites, 152 have now been designated under the Nature Act. Six sites are about to be designated. For two of the sites, a decision is still pending on whether to set the target for fresh water or salty, and public consultation still needs to take place.

Setting of conservation objectives:
- The methodology of setting conservation objectives for Natura 2000 sites is explained in the “Natura 2000 doelendocument” (2006) An English summary of this has been prepared: “Natura 2000 targets document: Summary. Setting conservation objectives for the Natura 2000 network in the Netherlands,” The methodology was similar to that used for habitat types and species (Habitats Directive) and bird species to ensure a coherent approach.
- Targets have been set on the national level and on the site level. For species and habitat types of the Habitats Directive, these targets are qualitative (conserve/enhance/enlarge). For birds, however, quantitative population goals have been set insofar as possible.
- The conservation objectives for each site are determined in the designation decisions made under national law (SAC or SPA).

Management of sites:
- For all Natura 2000 sites, comprehensive management plans will be made. At present, the management plans have been adopted for 11 sites. For 2 sites, the process has not started yet. The remaining 147 plans are in preparation, mostly in an advanced stage (either in the process of public consultation, or very close to it). For some 120 sites, an important part of the management plan is a thorough analysis of the landscape ecology of the site, used for the restoration strategies under the PAS (see S.3).
- If the comprehensive Natura 2000 management plan for a site is not finished yet, it does not mean that no conservation measures are taken in the site. In almost all nature areas in the Netherlands there are management plans made by the NGO that owns the site. In contrast to the comprehensive Natura 2000 management plans the NGO management plans are not explicitly aimed at the Natura 2000 objectives, parts of private owners are not included and other spatial, social or economic aspects are not taken into account. See also “*Site management*” in AV.1.

Ecological Network:
- The Natura 2000 sites are connected in the National Ecological Network (NEN). The National Ecological Network also consists of nature sites outside Natura 2000, and ecological corridors. These sites are all protected and their management focuses on optimizing the quality of nature. This nature acts as ecological corridors, it helps to make the Natura 2000 sites more robust and it also contributes to the national

[9] *http://wetten.overheid.nl/BWBR0009641/geldigheidsdatum_07-10-2011*
[10] Lammers et al. 2003

conservation status of BHD species and habitat types. For more information on the similarities and differences between NEN and Natura 2000 see AV.1. Within the network, but also outside, landscape features are managed for ecological coherence. In addition, specific habitat for species in agricultural areas is conserved, mostly outside the NEN. These efforts aim to benefit such species as "meadow birds," like the black-tailed godwit (*Limosa limosa*).

Specific objectives – species protection system, including hunting (art. 5,7 BD; art. 12-14 HD)
All species covered by the directives are protected under the Flora and Fauna Act[11]. All relevant articles of the BD and HD have been incorporated in this Act (see Lammers, 2003 - Annex 8). Bird hunting is prohibited in general; only three common species of birds are huntable: the common wood pigeon, pheasant and mallard. Hunting, taking, disturbing etc. of other species is only allowed in case of damage or safety issues. Licences are required, and derogations are reported.

Specific objectives – reintroduction of species Annex IV (art. 22)
Reintroduction programs for beaver and otter have been successfully implemented. However, the programs for hamster and scarce large blue have not achieved the same success.

References:
- Lammers, 2003. Kerncijfers voor de IBO studie Vogel- en Habitatrichtlijn. RIVM report 408768001/2003.
- Ministerie van Landbouw, Natuurbeheer en Visserij, 2006. Natura 2000 doelendocument – and English summary: Targets document. http://www.natura 2000.nl/files/natura 2000_targets.pdf
- Planbureau voor de Leefomgeving (PBL) 2010. Balans van de Leefomgeving 2010. PBL publication nr. 5000206001.
- Planbureau voor de Leefomgeving (PBL) 2014. Balans van de Leefomgeving 2014. PBL publication nr. 1308.

[11] *http://wetten.overheid.nl/BWBR0009640*

S.1.2- Is this progress in line with initial expectations?

'Initial expectations' refer to the expectations, positive or negative, held by different stakeholders at the time the legislation transposing the Directives came into force in your country. For example, government reports and plans might provide evidence of intended timetables for the identification and designation of Natura 2000 sites. We are seeking to understand the extent to which progress made to date has met, exceeded, or fallen short of such expectations. If possible, in your answer please address separately each of the objectives referred to in question S1.1 for which you have provided evidence.

Answer:

Strategic objectives: to maintain (or restore) natural habitats and population of species
The conservation objectives for the entire country (1 biogeographic region) and for all sites have been set to reach national favourable conservation status (or a good status for birds)[12]; see also S.1.1. In 2011, the decision was made to set the objectives in the first generation of management plans to restoration and/or enlargement (if indicated in the designation decision) only if feasible, otherwise the objective should be restricted to conservation[13].

Specific objectives – site protection system (art 4, 6, 10 HD; art. 3 BD)
Designation of sites:
In 2006, while composing the Natura 2000 targets document, the expectation was that nearly all Natura 2000 sites would be designated under national law by the end of 2008 (only internal planning schemes). However, the process of designation proved to be much more complicated and took far more time (see S.3). As a result, by the end of 2008, only 3 sites were designated (because they fell under the compensation art. 6.4). Ultimately, the majority of the sites were not designated until the 2011-2013 period. In 2011, three small sites that did not really contribute to the Natura 2000 network were eliminated. In 2015, 8 sites still remain to be designated under national law. Six sites are about to be designated. For two of the sites, a decision still needs to be made on whether the system will be fresh water or salty, and public consultation still has to take place. Thus, the designation of sites has proceeded slower than the initial expectations.
The marine SCIs were designated in 2008 and confirmed in 2009, and are expected to be designated as SACs by the end of 2015. In addition, two SPAs in the EEZ are expected to be designated by the end of 2015. The reason why SAC designation is not finished yet, in this case is that national nature law was still not effect in the EEZ. It entered into force during 2014.

Management plans
Under the 1998 Nature Act, comprehensive Natura 2000 management plans must be implemented within 3 years after designation (as Natura 2000). The delay of the designation also means a delay for the finalization of the management plans. Moreover, the solution for the problem of N-deposition, restoration strategies for which must be included in the management plans, was only finalized in 2015 (see also S.3). The original expectation was that by the end of 2011, all management plans would be ready (2008 + 3 years). In reality, however, this will not take place any sooner than the end of 2015. It was also expected that the management plans would be in the evaluation phase in 2015 (Targets document Natura 2000), an expectation which has proven correct for only one site (Voordelta).

Specific objectives – species protection system, including hunting (art. 5,7 BD; art. 12-14 HD)
According to initial expectations.

References:
Ministerie van Landbouw, Natuurbeheer en Visserij, 2006. Natura 2000 doelendocument – and English summary: Targets document. http://www.natura 2000.nl/files/natura 2000_targets.pdf

[12] MinLNV 2006 Targetsdocument
[13] See A3 in http://www.tweedekamer.nl/downloads/document?id=0ed5b482-7ebf-4afd-a8a8-69349d96c5bd&title=Aanpak%20Natura%202000.pdf

S.1.3 - When will the main objectives be fully attained?

On the basis of current expectations and trends, please provide evidence that indicates the likely year or range of years that the main objectives will be met. By 'main objectives' we mean the strategic objectives of the Birds Directive (as set out in its Article 2) and the Habitats Directives (in its Article 2), as well as the specific objectives set out in Annex I to this document.

Answer:

Strategic objectives: To maintain (or restore) natural habitats and populations of species
Although tremendous effort has been invested and progress has been made on improving the environment and protecting species and sites (see S.1), much of nature has not yet achieved a favourable conservation status. The main problems for the maintenance and restoration of biodiversity in the Netherlands are fragmentation, groundwater depletion, eutrophication and a shortage of suitable habitat (PBL 2013).
In 2013, the national government and provinces implemented a package of measures aimed at achieving the national and international nature objectives in the Framework Memorandum on Nature Development and Conservation in the Netherlands (*Hoofdlijnennotitie ontwikkeling en beheer van de natuur in Nederland*)[14]. One very important part of this contract is the implementation of the Birds and Habitats Directive in the Netherlands – in particular the development of management plans, the implementation of measures in the management plans and species protection. Another important measure is the implementation of the Programmatic Approach to Nitrogen (PAS), aimed at reducing nitrogen deposition and the effects of the deposition in Natura 2000 sites. The PAS is an 18-year programme. By the end of this period, the environmental conditions in Natura 2000 sites should be considerably better (see also S.3). The Netherlands Environmental Assessment Agency (PBL) calculated the measures and concluded that the agreement will significantly improve the conditions for the species and typical species of habitat types protected under the Birds and Habitats Directive (BHD). Compared to 2010 – when the conditions were sufficient for over 45% of the species – the Framework Memorandum will result in suitable conditions for over 65% of the species in 2027 (PBL 2013).
In 2016, an evaluation will be conducted on the agreements in the Framework Memorandum to determine, among other things, how and when the remaining 35% of favourable conditions can be achieved.

Specific objectives – site protection system
It is expected that all sites will be designated by the end of 2015, including the marine sites. The only exceptions are two sites (See S.1.1), which still need to undergo the entire process of public consultation.

At present, 35 comprehensive Natura 2000 management plans are in the process of public consultation, after which they can be adopted. It is estimated that 95% of the management plans will be ready for public consultation, or already have already passed through that process, by the end of 2015.
That a comprehensive Natura 2000 management plans is not finished yet does not mean that no conservation measures are taken in the site. In almost all nature sites in the Netherlands there are already management plans made by the relevant parties that are responsible for the site (see also AV.1).

Specific objectives – species protection system, including hunting
Already fully attained.

References

- Planbureau voor de Leefomgeving (PBL), 2013. (H. Bredenoord, A. van Hinsberg, B. de Knegt & F. Kragt). QuickScan Hoofdlijnennotitie 'Ontwikkeling en beheer van natuur in Nederland' Globale toetsing van effectiviteit en doelmatigheid. PBL-publicatienummer: 1101.
- Bijlsma, R.J., J.A.M. Janssen, F.G.W.A. Ottburg, C.A.M. van Swaay en E.J. Weeda, 2014. Evaluatie Natura 2000-doelen (deel I); Een oriënterende studie naar de haalbaarheid van gunstige referentiewaarden. Wageningen, Alterra Wageningen UR (University & Research Centre)/De Vlinderstichting. Alterra-rapport (intern EZ).

[14] http://www.rijksoverheid.nl/documenten-en-publicaties/kamerstukken/2013/09/18/kamerbrief-natuurpact.html

S.2 – What is the contribution of the Directives towards ensuring biodiversity? In particular to what extent are they contributing to achieving the EU Biodiversity Strategy* Objectives and Targets?

By 'contribution towards ensuring biodiversity', we are referring not only to the conservation of the species and habitats specifically addressed by the Directives, but also to biodiversity more broadly defined: i.e. other species and habitats not targeted by the Directives; ecosystems (terrestrial and marine); and genetic diversity, both within and beyond the Natura 2000 network – in line with the EU's 2050 vision and 2020 headline target and the Targets of the EU's Biodiversity Strategy to 2020.

** For an overview of the EU biodiversity Strategy see:*
http://ec.europa.eu/environment/nature/info/pubs/docs/factsheets/Biod%20Strategy%20FS.pdf

Answer:

There are no specific (quantitative studies) available that answer this question.

Most of the studies conducted were focused on contributing to national (policy) measures to BHD goals, not on the effectiveness of the BHD measures themselves on overall biodiversity. As already mentioned in S.1, every two years, the Netherlands Environment Assessment Agency (PBL) publishes a State of the Environment (Balans van de Leefomgeving) and reports on progress to meet the international (CBD) and EU (BHD) biodiversity goals. In 2010, the PBL[15] reported for the first time that the decline in biodiversity had slowed down on average. In 2014, the PBL[16] followed up with a report that the decline had been stopped on average. Nonetheless, three quarters of the habitats and species protected by the BHD are still in an unfavourable state of conservation. Despite that, these reports contained no statements or conclusions about the causality between the BHD measures and the goals in these directives that should be achieved.
The protection of sites is probably an important measure for conserving biodiversity. In this context, one consideration that should be taken into account is that the land acreage of Nature 2000 areas comprises about 50% of the total area of protected nature reserves in the Netherlands (Nature Network Netherlands, formerly known as the Ecological Main Structure). For fresh water (lakes) and coastal zones that percentage is almost 100%. (http://www.compendiumvoordeleefomgeving.nl/indicatoren/nl1425-Natura 2000-en-Ecologische-Hoofdstructuur.html?i=19-22). In light of that, while no causality has been quantified, the halting decline of biodiversity can be attributed to the protection of sites (including Natura 2000 sites). However, it should be noted that the Natura 2000 network, the establishment of the National Ecological Network (NEN) and introduction of agri environmental measures together contribute to preserve biodiversity. Moreover, the measures aimed at Natura 2000 species or habitat types also may have positive effects on non-target species (see, among others, the "Korhoen" case[17] and the measures taken to restore the population of European hamster in Southern Limburg that also helped farmland birds).

[15] Planbureau voor de Leefomgeving (PBL): Balans van de Leefomgeving 2010, ISBN: 978-90-78645-46-7; PBL publication nr. 5000206001; page 194
[16] Planbureau voor de Leefomgeving (PBL): Balans van de Leefomgeving 2014, ISBN: 978-94-91506-78-9; PBL publication nr. 1308; page 78
[17] Broekmeyer et al., 2015. Rapportage analyse cases-onderzoek implementatie Vogel- en Habitatrichtlijn. Alterra-rapport. *In preparation*

S.3 – Which main factors (e.g. implementation by Member States, action by stakeholders) have contributed to or stood in the way of achieving the Directive's objectives?

Please summarise evidence of the main factors that have supported or constrained progress towards achieving the objectives of the Nature Directives. As in previous questions, by 'objectives' we mean not only the strategic objectives set out in Articles 2 of both Directives, but also specific and operational objectives, as set out in Annex I to this document. Relevant factors might include, for example, resource limitations, lack of cooperation of other actors, lack of scientific knowledge, or other external factors (e.g. those listed in the above intervention logic).

Answer:

Introductory remarks
In past centuries, almost every square meter of the Netherlands has been reshaped, on land and in water. Despite this, and sometimes because of this, the country's nature is of international importance. At the same time, the Netherlands is a densely populated delta that hosts numerous activities, including intensive agriculture, transport infrastructure, energy intensive industries, water management and recreation. The country's socio-economic activities and nature management are strongly interwoven in a small area and often occur in the same areas. The environmental conditions of plant and animal species could easily fall under pressure, and it is difficult to maintain them or steer them into a favourable conservation status without risking considerable consequences for other actors and activities. Given these overall conditions, effective and efficient nature policies and legislation are imperative for nature protection. This has been acknowledged by society at large (RLI, 2013). There are many bottom-up initiatives from citizens, commercial enterprises, farmers, recreational entrepreneurs and nature conservation organisations to strengthen nature and the natural environment (not only for biodiversity improvement, but also for combining ecology and economy). However, at the same time, other parties, who have felt hampered in their goals by this legislation, have put it to the test by. Over the past decade, BHD has led to numerous national and European court cases, resulting in legally binding rulings (that allow less flexibility in nature conservation). As a result, the implementation of Natura 2000 has become a very administrative and legal undertaking. That, in turn, has influenced the progress reached at the level of the strategic, target and operational objectives.

With respect to the strategic objectives
Supporting factor
The decline in the overall negative trend in biodiversity has been stopped (question S.1). Dutch nature policies based on the concept of the National Ecological Network (NEN) and implemented from 1989 on has been an important supporting factor. Since then, over 100,000 ha of new nature area have been developed[18], mainly on former agricultural lands to connect the already existing nature areas ("green infrastructure"). The latter designated Natura 2000 sites are located – for the most part- in this NEN. The designation of Natura 2000 sites has considerably strengthened the protection regime for the nature values.
As also indicated under question S.1.3, the national government and the provinces have agreed on the implementation of nature development measures up until the year 2027 – including on the extension of the NEN, the management of the Natura 2000 sites and agro-environmental measures[19]. A policy study of the PBL[20] shows that the implementation of these measures will contribute towards achieving the Nature Directive's objectives (see also S1.3).

Constraining factors
<u>Environmental conditions are still poor and it takes time to improve them</u>[21]
To achieve the strategic objectives, it is necessary to improve the environmental conditions for protected habitats and species (see question S.1.). Overall, as a consequence of the implementation of the nature and environmental

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[18] Ministerie van Economische Zaken, 2015: "voortgangsrapportage Groot Project EHS en evaluatiekader Natuurpact" http://www.rijksoverheid.nl/documenten-en-publicaties/kamerstukken/2015/03/24/kamerbrief-bij-voortgangsrapportage-groot-project-ehs-en-evaluatiekader-natuurpact.html
[19] http://www.rijksoverheid.nl/documenten-en-publicaties/kamerstukken/2013/09/18/kamerbrief-natuurpact.html
[20] Planbureau voor de Leefomgeving (PBL), 2013. (H. Bredenoord, A. van Hinsberg, B. de Knegt & F. Kragt). QuickScan Hoofdlijnennotitie 'Ontwikkeling en beheer van natuur in Nederland' Globale toetsing van effectiviteit en doelmatigheid. PBL-publicatienummer: 1101.
[21] Wamelink et al. 2013.

policies, improvements have been made, though they are still insufficient[22]. In this respect, a distinction should be made between the following two major categories:

1. The development of the Natura 2000 sites within the National Ecological Network (NEN). Along this line, considerable progress has been made and will be made: the Natura sites have been designated, management plans are underway, measures are being implemented, and a programme to tackle the problem of the N-deposition has been established (the PAS, see below). However, it will take time for the results of these activities to show at the level of the strategic objectives;
2. The protection of species outside the NEN. Here, the situation is different and some serious problem areas have emerged. Certain species, such as birds, outside the NEN are on the decline[23]. One of the causes is the intensive land use by agriculture. To tackle this problem, a decision has been made to reform the programme for nature management on farmland ("agro-environmental measures"), and as of 2016, to focus it specifically on improving and managing habitats of the species protected under the Nature Directives[20]. This is expected to improve conditions for species, such as meadow birds.

<u>Insufficient options for responding to natural dynamics and for anticipating climate change</u>
The main objective of the EC biodiversity strategy is to protect nature as a set of dynamic systems. Major instruments of the strategy are the Nature Directives. However, due to national and European court law, the implementation of the Nature Directives has resulted in a strong focus on the protection of specific species and habitats in specific sites instead of on the favourable conservation status on the long term and on a national/biogeographical level[24].
Natural systems, however, are dynamic, both due to natural and human induced causes. In the process of natural succession, some species will be replaced by others. In implementing the Nature Directives, the strong focus on protecting specific species and habitats at fixed locations has caused several problems and areas of difficulty in the Netherlands. Some stakeholders have seen opportunities to eliminate these problems and achieve better results for nature and the underlying objectives of the Nature Directives. Often, however, they need more room to respond to the dynamics of natural systems. More possibilities for some trade off within a wider frame than the exact current location would give more room for dynamics. See also *plans and projects* below and R.3.
Examples of cases where (restoration of) natural dynamics stand in the way of reaching some specific objectives for Natura 2000 are elaborated by Broekmeyer et al.[25]:

- "Loevestein": the desire to bring back natural processes in the river system conflicts with the conservation of lowland hay meadows that need a mowing regime.
- "Vismigratierivier": the (technical) restoration of the transition from fresh to salt water between IJsselmeer and Wadden Sea to make migration of fish possible will mean a (small) decrease of area of the salty habitat types in Wadden Sea.
- "ANT IJsselmeer": due to measures in the context of the WFD to lower the unnatural high nutrient level of the water of IJsselmeer the numbers of birds for which objectives have to be met for Natura 2000 will decrease.

For more examples see R.1.

A policy research report by the PBL[26] on the consequences of climate change in nature concluded that climate change will add dynamics to natural systems. Based on that, this report also concluded that it is not realistic in nature policies and site management to focus on the sustainable survival of specific species in fixed places. Instead, climate-proof nature policies, as well as EU Nature Directives, should devote more attention to the functioning of ecosystems and to increasing the adaptive capacity of natural systems and consider conservation status on a higher level (see further R.1). For the Netherlands, this report contains the outlines of an adaptation strategy.

With respect to specific objectives and measures / operations

The establishment of a coherent Natura 2000 network

[22] Planbureau voor de Leefomgeving (PBL): Balans van de Leefomgeving 2014, ISBN: 978-94-91506-78-9; PBL publication nr. 1308;
[23] Vogelbalans 2014, for example birds of meadows and fields
[24] This is reinforced by the ruling of the European Court of Justice in the case Briels / A2. See also a.o. Bastmeijer & Willems (2010)
[25] Broekmeyer et al., 2015. Rapportage analyse cases-onderzoek implementatie Vogel- en Habitatrichtlijn. Alterra-rapport. *In preparation*
[26] Planbureau voor de Leefomgeving (PBL), 2010. (Vonk, M., C.C. Vos & D.C.J. van der Hoek). Adaptatiestrategie voor een klimaatbestendige natuur. PBL-publicatienummer: 500078002

The process of establishing the network and designating the Natura 2000 sites has taken more time than expected (see also question S.1.2). This is largely due to the fact that many Natura 2000 sites are either used in for multi-functional purposes, or located in a multi-functional environment. Thus, the designation of a site as Natura 2000 often has major negative consequences for activities and actors in and around the Natura 2000 site. In total, public consultation resulted in over 10,000 views, which proved very time consuming to process. In fact, it took a number of years.
One example is the case of the Natura 2000 site of Engbertsdijksvenen in the eastern part of the Netherlands. A cost-benefit analysis there showed that, at the local-level, in a 5-km radius zone around the Natura 2000 site, the costs were substantially higher than the benefits[27] (see also Y.4). In many such cases, stakeholders have started legal procedures against the designation of the Natura 2000 sites, its objectives and its borders. In cases where the designation of a Natura 2000 site had fewer consequences for activities and actors in and around the site, or where win-win situations were feasible[28], the designation of the sites posed fewer problems. This underlines the importance of exploring win-win solutions, where possible (see also Y.4).

Site protection system.
<u>The delay in the preparation of management plans (related to the problem of high N-deposition)</u>
Because the Netherlands is a densely populated country with many industries, agriculture and traffic, the high levels of N-deposition on many of the Natura 2000 sites is a major problem area in the preparation and implementation of site management plans. This problem affects 117 of the 160 Natura 2000 sites. In 2010, it was decided that solving this problem would require the development of a programmatic approach. This Integrated Approach to Nitrogen (PAS)[29] was ultimately finalized in 2015. Now the PAS comes in its implementation phase, also the management plans of the sites concerned can be finalized (see also question S.1.3).
The PAS is a plan consisting of an interconnected set of activities of which the effects are discounted resulting in nett positive effects on the BHD-values. The PBL has implemented a kind of ex-ante evaluation of the PAS: “Beoordeling PAS”[30], confirming that the PAS is a robust approach to strengthen BHD-values in combination with creating conditions for economic development.
The BHD require that negative impacts on BHD values are to be avoided. In the Dutch context, in which in many of the Natura 2000 sites the levels of N-deposition are high, it cannot be excluded that a small increase of the level of N-deposition has significant negative effects on the BHD-values. Furthermore, the BHD does not allow to balance a (small) negative effect in one part of the area with an (even or larger) improvement on another part of the area. As a consequence, this has resulted in a strict design of the PAS. If the BHD would allow for small temporarily negative effects in the context of a programmatic approach as the PAS with overall positive effects, a more flexible approach to the implemenation of the PAS would have been possible.

<u>The problems of relatively small and isolated Natura 2000 sites and “difficult” values</u>
Aside from several large and robust nature-sites, the Netherlands has also designated a number of small areas as Natura 2000 sites. The protection of these smaller sites often requires a relatively large investment of effort, while the sites themselves place fairly large constraints on their surroundings[31]. In addition, there are species and habitat types that are very rare in the Netherlands, and on the edge of their natural range, but are common and flourishing elsewhere in Europe. Examples are the active raised bogs (7110), calcareous grasslands (6210) in Limburg, black grouse (*Tetrao tetrix*).
Broekmeyer et al[28] describe the problems encountered in two of such cases: the case “Korhoen” (black grouse) and the case “Engbertsdijksvenen”. Concerning the conservation of the black grouse it has been found that although the appropriate measures have been taken, a viable population cannot be maintained at this site. Concerning the case Engbertsdijksvenen it was found that to protect and develop raised bogs measures have to be taken on ca 250 ha of agricultural land outside the Natura 2000 site itself, that have large impact on the surrounding agricultural lands. Possibly farms will have to be displaced. This Natura 2000 site is close to the German border, where at the other side in some areas raised bogs are under a less strict protection regime.
In such cases, experience has shown that it is very important to be able to explain to stakeholders and the public: (i) the Netherlands, because of the European state of the species or habitat, actually has an important responsibility to protect these specific species or habitat types at those designated sites, and (ii) that the envisioned results are truly feasible in the designated site and could contribute significantly to an overall favourable conservation status. In these cases, it is justified and effective to invest a great deal of effort. In cases where this cannot clearly be explained or ascertained certain stakeholders may question the protection of the

[27] Stijn Reinhard et al, MKBA Engbertsdijkvenen, LEI Wageningen UR/Witteveen en Bos/CLM, Wageningen 2014
[28] For example case Oldematen in Broekmeyer et al., 2015. Rapportage analyse cases-onderzoek implementatie Vogel- en Habitatrichtlijn. Alterra-rapport. *In preparation*.
[29] http://www.rijksoverheid.nl/documenten-en-publicaties/kamerstukken/2014/12/19/programmatische-aanpak-stikstof.html
[30] R. Folkerts et al., 2014
[31] Bijlsma et al., 2012 researched if the joining of relatively small Natura 2000 sites could be a solution.

BHD-values in the areas concerned and raise the issue of the cost effectiveness of the investments. Important questions in this context are (i) to what extent (expected) effectiveness and (expected) cost-effectiveness should be factors in implementing the Nature Directives, and (ii) how to determine at which site(s) the objectives of the Nature Directives could be realised in the most effective and cost-effective way at the level in an international perspective.

Cross border coordination

In many border areas, species and habitat types occur on both sides of the border. In such cases, a coordinated cross-border strategy could be very effective in improving ecological and environmental conditions and in integrating nature management into regional planning and development. However, at the moment, the Netherlands and its neighbours plan and implement the BHD differently. This is partly caused by the fact that BHD objectives for Member States are determined at a national level and not at an international level, for example at the level of the biogeographical region. Also at both sides of the borders different standards may be used to assess projects[32]. The management of complete cross-border catchment areas is an example of the potential usefulness of this approach. In practice, it hardly ever occurs. Some good examples are the protection of the Salmon in the River Meuse, the Calaminarian grasslands (6130) in the valley of the Geul and the Natura 2000 site Zwin.

Plans and projects

In general, the BHD provides a good framework for the coordination of the involved societal interests, including biodiversity. This framework functions when preparations for projects start in time and the requirements resulting from the BHD are timely incorporated in the design process of the project. The majority of the projects involving biodiversity legislation run smoothly, depending on the complexity of the project. In clear cut cases the framework supports decision making on plans and projects in relation to the protection of BHD-values[32]. Veen et al.[33] find that in 2010 4,5% of the exemptions of the Flora and Fauna Act were refused, mainly because of lack of research and only 0,5% was refused because of endangering the favourable conservation status of protected species. The exemptions of the Nature Conservancy Act are granted in 95% of the cases. A part is rejected because insufficient data are provided. Also RoyalHaskoningDHV[34] shows that the largest share of projects can be realized by project or plan adjustments (more or less plan elements, spatial and temporal optimization of the plan, ecological optimization of the design and increase the mitigation). However, in more complex projects involving many stakeholders and in which many interests and societal objectives are at stake, the BHD-framework appears very strict in its application. This complicates the preparation and implementation of those plans and projects. Major issues are discussed here below.

Issue: the assessment of plans and projects

Spatial planning is important for the achievement of the Directive's objectives in the Netherlands. In practice, however, the appropriate assessment of plans as required in article 6 (3) of the Habitats Directive can be problematic. The level of abstraction for the plans and the period in which they remain in effect (10 years in the Netherlands for spatial development plans) are unsuited to the absolute certainty (no reasonable scientific doubt), required by this provision that the integrity of the site will not be adversely affected. In accordance with case law, the potential effects of each theoretically possible development that could arise from the plan must be taken into account and assessed as if it were a "project." This is despite the fact that, in the future, every project must be assessed before being implemented, as stipulated by the requirements in article 6 (3), a provision aimed at preventing any potential adverse effects in the Natura 2000 sites. This is an obstacle for adopting new spatial development plans, which could be more effective in supporting the Directive's objectives the plans that are currently in force. For plans, on a higher level of abstraction, the complete appropriate assessment therefor may be too complicated. For the assessment of impacts and compensation the strategic environmental assessment of policy plans and programs (2001/42/EC Directive) might be sufficient.

For example, in planning the development of the Port of Rotterdam, the impact of the realization of the area "Maasvlakte 2" and the spatial plan (including the use) of Maasvlakte 2 have been assessed. No alternatives for Maasvlakte 2 have been found and the imperative reasons of overriding public interest for the development of Maasvlakte 2 had been proven. By now, the compensation measures for the impact of Maasvlakte 2 have been realized as well. This included a.o. the realization of 35 hectares of new dune area. Although the use of

[32] Netwerk Groene Bureaus, 2015. Experiences of Dutch consultancies with the Habitats and Birds Directive. Odijk. *In preparation*

[33] Veen, M.P. van, M.E. Sanders & M.E.A. Broekmeyer, 2011. Ecologische effectiviteit van natuurwetgeving. PBL-publicatienummer 555084002. Planbureau voor de Leefomgeving, Den Haag.

[34] RoyalHaskoningDHV, 2013 Natura 2000 areas locked? Factors examined in relation to a project or plan realization. Commissioned by Rijkswaterstaat WVL, Lelystad [in Dutch: https://deltaprogramma.pleio.nl/file/download/24225622]

Maasvlakte 2 was included in the assessment of the plan of Maasvlakte 2, the new companies on Maasvlakte 2 have, as individual 'projects', to make their own assessment reports regarding their impact on protected Natura 2000 areas. This is an example of the double assessment that the Habitat directive currently demands which causes an additional administrative burden.

Issue: definition of significant effects is not set.

The BHD requires that negative effects and impacts of plans and projects on the BHD-values to protect must be avoided. However, in many cases ecologists do not have sufficient ecological knowledge to assess if a plan or project has significant negative effects. In many cases, practical solutions can be found to tackle this problem. However, especially in cases where there are conflicts of interests that lead to court cases, the precautionary principle prevails. The problems of assessing the (significance of) effects and impacts of plans cause uncertainty for enterprises and citizens.

Some stakeholders argue that on a European level standards should be set. For example, on a European level critical deposition values for each habitat type have been set. It should, therefore, be possible for experts to also reach a common understanding on a European level to when a contribution to eutrophication has a significant effect on a habitat type. The current difference between Member States regarding the threshold for significance (for instance 0.05 mol/ha/yr in the Netherlands[35], , and 21,4 mol/ha/yr in Germany[36], both based on scientific knowledge) results in additional administrative burden and legal uncertainty for project developers.

If there is more clarity regarding the threshold, it is also possible to limit the necessary assessments to those areas where a significant effect cannot be excluded.

Issue: the rules for the mitigation of the effects of plans and projects

The BHD-rules for mitigation are strict. From the so called "Briels Arrest[37]" follows that the BHD requires that in assessing where a project leads to degradation of the natural characteristics of an area, only those protection measures may be involved, which intend to prevent the harmful effects arising directly form the project or to reduce the area of the location of the habitat type that is negatively affected by the project. Measures that have positive impacts on the same habitat type in an area not affected by the project are not to be involved in the assessement and are not to be considered as mitigating measures. If the BHD values are not in a good condition not only the current situation, but also the room for the necessary improvement should be assessed. This makesthat any negative change - however small and also when only temporarily - may be significant. Examples are:

- Integrated projects where more societal objectives and many interests and stakeholders are involved: In such cases, the BHD limits the possibilities to realize "win-win" situations with both positive effects for BHD-values and for other private and public objectives. For example, is causes that certain good plan alternatives are excluded fom the planning proces (see also the next issue and the cases mentioned there);
- Projects for nature developing, including BHD-values, for example: for the enlargement of the Natura 2000 site Westerschelde & Saeftinghe. works are necessary that on the short term negatively affect some of the BHD-values of the site, although in the long terms the impacts are positive. According to the BHD-rules and in line with the "Briels-arrest", it has te be assessed if the enlargement works cause significant negative effects. If they do, mitigation or compensation has to take place. In that situation without the mitigation or compensation, a project the aim of which is to develop BHD-values cannot be implemented.

Constraining factor: lack of successful strategies for combining nature development with other socio-economic activities and for integrating BHD-objectives in "nature-inclusive" area development.

Stakeholders in the Netherlands have seen great potential for achieving BHD goals in combination with other public objectives, such as water management, recreation, housing, or integrated area development. In principle, such an approach is cost effective, as investment and management costs for nature can be shared to some extent with other cost carriers. Moreover, the combined approach is important for conserving the Natura 2000 values, as many Natura 2000 sites are either used for multi-functional purposes, or are located in a multi-functional environment. In these contexts, a win –win solution would help strengthen public support for the BHD.

However, in practice, the application of such an integrated approach has proven difficult to reconcile with the BHD. A part of the problem is due to the definition and application of the terms "plan" and "project" and the application of the articles 6.1-6.4 in the cases of integrated approaches.

Such integrated approaches– either spatial or thematic (f.e. a watermanagment plan of an area development plan

[35] http://www.rijksoverheid.nl/documenten-en-publicaties/besluiten/2014/10/09/ontwerpbesluit-grenswaarden-programmatische-aanpak-stikstof.html

[36] see Bundesverwaltungsgericht 9A25-12 from the 3rd of April 2014.

[37] Court of Justice. Luxemburg 15 May 2014, C-521/12, Briels (Preliminary refererence Directive 92/43/EEC, article 6. Paragraph 3 and 4 (A2 's Hertogenbosch-Eindhoven)

("gebiedsontwikkeling") - typically consisist of a set of interconnected activities. The combined effects of these activities have a nett positive effect on both the BHD values and on the other societal objectives concerned. However, in the assement procedures, the integrated programmes/projects are generally split up. The "non-nature components" are considered as plan/project to which articles 6.3 and/or 6.4 have to be applied, and the "nature component" is eventually considered as mitigation or compensation. This "splitting up" hinders the implementation of the integrated programmes / the projects, especially when the BHD-values of a site are not in a favourable condition. Often it appears to be difficult to prove the imparitive reason of overriding public interest of the activity, especially when is concerns activities of private parties. Then first measures have to be taken to assure that the good condition of the BHD-values can be reached, before the other components of the programme can be implemeted. This is not always attractive for both public and private parties and discourages initiators of such integrated projects. In such cases, the BHD limits the possibilities for the realisation of "win-win"-situations that have also nett positive effects on BHD-values.
Broekmeyer et al analysed a number of such integrated "nature inclusive" projects in relation to the application of the articles 6.1, 6.3 and 6.4 and the definition of the concepts "plan" and "project" (the case "Hondsbossche Zeewering" (watersafety (coast) and BHD-values), the project "Markerwadden" (a.o. recreation, housing construction, BHD-values), the project "Verbreding A2" (infrastructure, BHD values) and case "Stroomlijn" (watersafety (rivers), BHD-values)).

Financing
See question Y9.

Landscape features
Important reasons to invest in strengthening landscape features include their role in connecting Natura 2000 sites and the need to create habitats for BHD species outside the Natura 2000 sites. As already mentioned, the Dutch Natura 2000 sites are included in the National Nature Network and are connected to each other through this network. This programme will be continued in upcoming years; see the document entitled "General Agreement on Nature Development and Management in the Netherlands" (*Hoofdlijnenakkoord Ontwikkeling en beheer van natuur in Nederland*)[38].

Species protection system
The BHD policies on species makes little distinction between common and rare animal species. For example, no distinction is made between the common pipistrelle bat (*Pipistrellus pipistrellus*), whic is abundant in the Netherlands, and other rare species that require extensive protection measures. As a result, society faces strong obligations to protect animal species that do not really need that level of protection. This is not efficient and – perhaps more importantly – it harms public support for environmental measures. Ultimately, that will affect species that do need high levels of protection. Broekmeyer et al.[39] describe this in the case "Algemene vleermuizen". See also Y.7.

[38] http://www.rijksoverheid.nl/documenten-en-publicaties/kamerstukken/2013/09/18/kamerbrief-natuurpact.html
[39] Broekmeyer et al., 2015. Rapportage analyse cases-onderzoek implementatie Vogel- en Habitatrichtlijn. Alterra-rapport. *In preparation*

S.4 - Have the Directives led to any other significant changes both positive and negative?

This question aims to assess whether the implementation of the Nature Directives has brought about any significant environmental, social or economic effects or changes that were not intended or foreseen by the Directive at the time of their approval, and whether these changes were positive, negative or neutral in terms of their contribution towards meeting the objectives of the Directives. Examples of such effects or changes might include the development of a culture of social participation in nature-related decisions as evidenced by Committees for the development of management plans or higher cooperation of departments of different ministries, etc.

Answer:

The Directives have led to significant changes - both positive and negative. One important change is that nature and biodiversity are taken much more into account in spatial development projects on the local, regional and national level.

Examples of positive changes are:

1. *More focus on natural assets and multifunctional combinations*
   Although public support for nature regulation is diminishing, there appears to be a continuous support for nature as such. The Dutch government now aims to recruit society in the process of strengthening natural assets[40]. This requires individuals and businesses to play a new role and take responsibility for nature conservation and sustainable use, which the public are keen to do. An important aspect is the combination of nature with other relevant policies such as economy, cities and health. The business community is taking ever increasing account of nature and biodiversity. Companies have begun to understand that green business practices are in their own interests. Companies that do not function in a sustainable manner ultimately become unable to compete on global markets. As the following examples show, this new vision on nature is already evolving in society:
   - urban buildings are being designed with “green” roofs[41];
   - ecological noise barriers have been built along motorways;
   - local residents are maintaining communal gardens, or local nature areas. Residents in a Boxtel neighbourhood, for instance, jointly purchased a nature area as big as approximately 13 football pitches;
   - nature is being given space to flourish along rivers, which also protects the surrounding area against flooding. A good example is the nature development project along the River IJssel near Welsum and Fortmond in the province of Overijssel. Van Hattum et al. 2014 researched success factors, constraints and chances to combine objectives for nature and flood protection;
   - Groups of farmers and locals are joining forces to preserve valuable landscapes;
   - A fauna management plan focused on seagulls within the port of Rotterdam has been set up to ensure public safety within the port area combined with maintaining a good conservation status of these protected birds[42].

2. *New forms of governance such as voluntary regulatory frameworks and guidance*
   New forms of governance, such as voluntary regulatory frameworks and guidance resources, have emerged. The Natura 2000 programme in the Netherlands has contributed to recognition in various sectors of the advantages of forms of self-regulation, such as codes of conduct and charters[43].

3. *Manifesto nature, landscape and economy in a vital country*
   On July 9, 2010 eight parties signed the manifesto “Nature, landscape and economy in a vital country.” As specified by the signing parties, the key point of the manifesto is that maintaining a vital country of high quality is essential to the future development of prosperity and well-being in the Netherlands. It is the type of attractive environment in which present and future generations want to live, work, enjoy recreation and invest, and in which farmers and recreational entrepreneurs, and other businesses want to pursue enterprise. Only in a vital country will there be support for the maintenance of its quality, and economically healthy businesses can contribute to that vitality and quality. For that reason, the different societal functions of the

[40] 'The Natural Way Forward', Dutch government vision, 2014. http://www.government.nl/issues/nature-and-biodiversity/government-vision-on-nature
[41] www.teebstad.nl
[42] Lensink, R., 2015. Faunabeheerplan meeuwen havengebieden van Rotterdam, Dordrecht en Alblasserdam 2015-2019. Rapport nr. 14-146. Bureau Waardenburg bv, Culemborg.
[43] Snethlage, M., B. Delbaere, P. Fernandez, L. García, M. Ferreira and M. Kaandorp (2012) Sectoral Experience with Natura 2000. ECNC Group, Tilburg / Leiden. 138 p.

country (living, working, recreation, nature, landscape, cultural history) should be linked spatially and economically in a more sustainable manner. Interestingly, the manifesto was signed not only by green organisations, but also by the organisations in the recreational, agricultural and rural sectors.

Examples of negative changes:

1. *The(risk of) diminishing support for nature conservation*
   In 2013, the Dutch Council on Environment and Infrastructure (RLI) issued an advisory report to the Dutch government, based on seven research reports regarding several aspects of the nature policies in the Netherlands (e.g. the effectiveness of nature policies, financing instruments, and public support for nature). The Council concluded that the goals in Dutch nature policies have been structured meticulously and the instruments have been strictly enforced as a result of jurisdiction of national and European court. As a result, nature is often perceived as a burden and a threat to economic development. For example, property developers fear the presence or development of nature conservation on plots that they plan to use for their developments. In fact, fallow plots in Rotterdam Harbour, were ploughed regularly in order to prevent a natural environment from developing there. In the light of this and the research on public support, the Council concluded that while there is a broad base of support for nature, there is less support for nature legislation[44].

2. *The (risk of the) juridification of the BHD.*
   According to the BHD, the current quality must be conserved. In practice, improvements must be valued against the decrease of the current quality. This stipulation obstructs any plans that offer obvious improvements in the spatial and ecological quality for several species if they pose negative consequences for one specific protected species that is currently present in the area. This experience does not result from contradictions between EU and Dutch national legislation; it merely represents a tension between the BHD system and the state of nature in the Netherlands, including the state of the water system.
   Because it is hard to exclude negative impact on nature, this may lead to situations where comparative assessments, that balance all interests of different stakeholders in a certain area, can be dominated by a procedure started by one stakeholder who uses the Directives to stop a project that he/she is against (Nimby). This is for example the case in case "Hondsbossche zeewering"[45]. The investments needed to make balanced decisions that are legally acceptable (avoiding risks) could, therefore, be at the expense of the integral quality of an area's development. In light of this, strict interpretation of the legal regulations could actually impede efforts to improve conservation status, which, in turn, would deal a blow to public support for nature conservation.

References:

"Nederland op slot? De Europese en Nederlandse natuurbeschermingswetgeving nader bezien. Eindrapportage" Interdepartementaal Beleidsonderzoek, 2002-2003, nr. 7

[44] RLI 2013, Onbeperkt houdbaar. Naar een robuust natuurbeleid.
[45] Broekmeyer et al., 2015. Rapportage analyse cases-onderzoek implementatie Vogel- en Habitatrichtlijn. Alterra-rapport. *In preparation*

Efficiency

Efficiency is essentially a comparison between inputs used in a certain activity and produced outputs. The central question asked here is whether the costs involved in the implementation of the EU nature legislation are reasonable and in proportion to the results achieved (benefits). Both 'costs' and 'benefits' can be monetary and/or non-monetary. A typology of the costs and benefits resulting from the implementation of the Directives is given in Annex II to this questionnaire. In your answers, please describe the nature, value and overall significance of the costs and benefits arising from the implementation of the Directive, supported by evidence.

Y.1 - What are their costs and benefits (monetary and non-monetary)?

Based on the explanation given above, please indicate, supported by evidence, what types of costs and benefits have resulted from the implementation of the Nature Directives. Please provide evidence, quantitative where possible, of costs and benefits, describe their nature (monetary/non-monetary) and value, and who is affected and to what extent. Please distinguish between the costs and benefits arising from the Directives themselves and those arising as a result of other factors. To facilitate analysis of the answers it would be useful if costs and benefits could be addressed separately.

Answer:
In answering this question, nature protection in the Netherlands will be discussed first. After that, historic and future government expenditure on nature will be addressed. The answer concludes with the costs and benefits of the Integrated Approach to Nitrogen (PAS), which guarantees that the Natura 2000 objectives will be met, while creating room for economic development.

Nature protection in the Netherlands
Nature protection efforts in the Netherlands focus on three types of areas: Natura 2000 sites, sites within the National Ecological Network and sites outside the National Ecological Network. Differences can be found in the protection regimes and protection levels. To a certain extent, all three will be favourable for species and habitats that are protected by the Birds and Habitats Directives.

Table Y1.1. Protection regimes for nature areas in the Netherlands

Area	Protection regime	Protection level
Natura 2000	European	High
National Ecological Network	National	Medium
Other nature areas	No protection regime	Low

Source: Algemene Rekenkamer (2014), Beschermingsregimes EHS, Natura 2000 en overige natuurgebieden; Internetbijlage bij rapport 'Compensatie van schade aan natuurgebieden', Den Haag

The main objective of the Natura 2000 network is to safeguard biodiversity in Europe. To this end, it has been agreed that the Member States of the European Union will take all necessary measures to ensure a favourable conservation status of species and habitat types of Community importance. In the Netherlands, this agreement applies to 52 habitat types, 95 bird species and 78 other species (35 species of Annex II). The Dutch Natura 2000 network consists of 160 Natura 2000 sites.

The National Ecological Network is the national long-term project for the conservation of biodiversity. This project focuses on interconnecting nature reserves, thereby increasing the living base for species and promoting exchange between populations.
There is considerable spatial overlap between the National Ecological Network (NEN) and the Natura 2000 areas. Apart from a few boundary differences, all Natura 2000 sites fall entirely or mainly within the NEN. In many cases, Natura 2000 site objectives are similar to NEN nature objectives for the same area (MNP (2005), Natuurbalans 2005, Netherlands Environmental Assessment Agency (MNP), Bilthoven, p. 62, see http://www.pbl.nl/sites/default/files/cms/publicaties/408763002.pdf).

About 331,000 hectares of the NEN on land is Natura 2000 area (Broekmeyer, M.E.A., E.P.A.G. Schouwenberg, M.E. Sanders and R. Pouwels (2007), Synergie Ecologische Hoofdstructuur en Natura 2000-gebieden. Wat stuurt het beheer?, Werkdocument 54, WOt Natuur en Milieu, Wageningen, see http://edepot.wur.nl/26294).

Historic government expenditures on the NEN
Government expenditures on the acquisition of land and, if necessary, conversion into nature area were, on average, € 155 million per year over the 1990-2011 period (2011 price level). There is, however, a large variation around this average, ranging from € 75 million to € 310 million. After a relatively steady period up to 1999, a considerable increase took place from 2000 to 2003. Budgets and actual payments increased by a factor

2.5, mainly due to a boost in land acquisition (the so-called Nature Offensive). It should be noted that this peak appears after a series of years with strong economic growth. After the impulse, expenditures declined due to policy measures following the economic recession and resulting budget restrictions (Gaaff & Verburg (2007). See Indicators for the Convention on Biodiversity 2010; Government expenditure on land acquisition and nature development for the National Ecological Network (NEN) and expenditure for international biodiversity projects; http://edepot.wur.nl/29913).

On average, government expenditure on nature management of the National Ecological Network (NEN) was slightly above € 140 million per year over the 1990-2011 period (2011 price level).
Expenditure and budgets on nature management showed a steady annual increase of about 2.7% (adjusted for inflation). During the 1990-2004 period, deviations from the trend showed littlesignificance. The growth appears to be autonomous, independent of economic climate and political situation (Gaaff & Verburg (2007). See Indicators for the Convention on Biodiversity 2010; Government expenditure on land acquisition and nature development for the National Ecological Network (NEN) and expenditure for international biodiversity projects; http://edepot.wur.nl/29913).

Table Y1.2. Government expenditures on land acquisition, nature development and management for the National Ecological Network (in € mln, nominal and in 2011 prices)

	Land purchase		**Development**		**Management**		**Total**	
	Nominal	**2011-p.**	**Nominal**	**2011-p.**	**Nominal**	**2011-p.**	**Nominal**	**2011-p.**
Year	**€ mln**	**€ mln**	**€ mln**	**€ mln**	**€ mln**	**€ mln**	**€ mln**	**€ mln**
1990	41	61	16	24	64	95	120	180
1991	41	60	19	27	69	100	128	187
1992	37	52	16	23	69	98	122	173
1993	41	58	13	18	73	102	127	178
1994	48	65	20	28	77	106	145	199
1995	54	73	22	30	86	116	163	218
1996	61	80	25	32	95	125	180	238
1997	84	108	26	33	102	132	211	273
1998	75	95	26	33	96	122	198	250
1999	56	70	27	34	100	124	182	227
2000	194	234	38	46	108	131	340	411
2001	224	261	44	51	119	139	387	450
2002	204	232	22	25	119	135	344	391
2003	141	156	34	37	110	122	284	315
2004	74	82	30	33	117	128	221	243
2005	81	88	26	28	139	151	247	267
2006	75	80	47	50	165	175	287	305
2007	85	89	123	128	171	178	379	395
2008	76	78	144	147	168	172	389	397
2009	54	55	128	131	172	176	354	362
2010	42	42	137	138	189	191	367	372
2011	103	103	112	112	240	240	455	455
Total		**2,220**		**1,208**		**3,057**		**6,485**

Source: Expenditures for 1990-2006 based on Gaaff & Verburg (2007), Indicators for the Convention on Biodiversity 2010; Government expenditure on land acquisition and nature development for the National Ecological Network (NEN) and expenditure for international biodiversity projects. Expenditures for 2007-2011 based on annual reports of the Ministry of Agriculture (LNV/EL&I); calculations of the expenditures on 2011 price level based on the GDP deflator from the OECD Outlook for May 2012 (preliminary version).

Present and future government expenditures on nature
In *Rijksoverheid* (2011), the Dutch government and the twelve provinces agreed to finance nature conservation management between 2011 and 2013 with the remaining Investment Budget for Rural Areas (Investeringsbudget Landelijk Gebied, or ILG budget). The allocation of these budget funds to all provinces was registered in twelve different convenants; (*Rijksoverheid* (2011) *Onderhandelingsakkoord decentralisatie natuur*, 20 September 2011).

P.M. The funding for nature policy in the 2012-2013 period can be retrieved from these twelve separate

convenants.

In *Rijksoverheid* (2013), the Dutch government and the twelve provinces agreed that the provincial authorities would be financially responsible for nature management as of 2014; see *Rijksoverheid* (2013), *Natuurpact ontwikkeling en beheer van natuur in Nederland*. Between 2014 and 2021, the Dutch government will provide over € 2 billion (nominally) in funding. Another € 455 million will be provided by Dutch provincial authorities, and € 280 million will come from EU co-funding via RDP3. In total, the funding amounts to almost € 3 billion nominally (see table). This table does not take account of any additional efforts of individual provinces (PBL (2013); *Quickscan Hoofdlijnennotitie 'Ontwikkeling en beheer van natuur in Nederland'; Globale toetsing van effectiviteit en doelmatigheid*, Bilthoven).

Table Y1.3. Funding of nature policy 2014-2021

Year	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**Total**
Dutch government funding	210	210	410	410	310	310	310	**2,170**
• Government (Administrative Agreement)	105	105	105	105	105	105	105	**1,400**
• Government (Hoofdlijnennotitie)	100	100	300	300	200	200	200	**735**
• Min. of Infrastructure & Environment(hydrology)	5	5	5	5	5	5	5	**35**
Provinces (Bestuursakkoord)	65	65	65	65	65	65	65	**455**
EU co-funding (RDP3)	40	40	40	40	40	40	40	**280**
Total	**315**	**315**	**515**	**515**	**415**	**415**	**415**	**2,905**

Source: PBL (2013) Quickscan Hoofdlijnennotitie 'Ontwikkeling en beheer van natuur in Nederland'; Globale toetsing van effectiviteit en doelmatigheid, Bilthoven & Rijksoverheid (2013) Natuurpact ontwikkeling en beheer van natuur in Nederland, Den Haag

Of the annual expenditures of € 415 million, almost one third is spent on nature conservation management and a quarter on land purchase and development. Agri-environmental payments, goose management, restoration management, hydrology and other measures account for smaller shares (see table 4).

It is not exactly clear which share of the expenditures contributes to a favourable status for nature areas protected by the Birds and Habitats Directive. According to Leneman et al (2012), hydrology measures and restoration management, including measures aimed to reduce the effects of soil acidification and nitrogen deposition, can be attributed completely to Integrated Approach to Nitrogen (PAS) (and consequently, to Natura 2000 as well). Goose management and agri-environment funding (including habitat **management** for the benefit of **meadow birds)** will contribute towards achieving objectives of the Birds Directive. Nature conservation management, land purchases, nature development and other measures (including monitoring and compensation of damage to crops by geese and other animals) will contribute not only to Natura 2000, but also to nature conservation within and outside the National Ecological Network (NEN, in Dutch: Natuurnetwerk Nederland). To a certain extent, nature areas within and outside Natura 2000 and NEN will benefit species and habitats that are protected by the Nature Directives.

Table Y1.4. Expenditures per type of measures (€ million per year)

Type of measures	**Expenditures**	**Share in total exp.**
	€ million per year	**%**
Land purchases & nature development	100	24%
Nature conservation management	130	31%
Agri-environment payments & goose management	70	17%
Restoration management & hydrology measures	75	18%
Other measures (e.g. monitoring)	40	10%
Total	**415**	

Source: PBL (2013) Quickscan Hoofdlijnennotitie 'Ontwikkeling en beheer van natuur in Nederland'; Globale toetsing van effectiviteit en doelmatigheid, Bilthoven

<u>Benefits and costs of the Birds and Habitats Directive</u>
A cohesive study of the costs and benefits of the Birds and Habitats Directives has not been carried out in the

Netherlands. For example, in 2006, the costs and benefits of Natura 2000 were examined separately in two different studies, that were incomparable in terms of methodology and results. For the costs of administrative burden see Y.7.
(For the costs, see: Reinhard, Stijn (red.), Aris Gaaff, Willem van Deursen, Pim Roza, Karel van Bommel, Ernst Bos, Jakob Jager, Susanne Groot, Lanie van Staalduinen (2006), Additionele kosten en sociaal-economische gevolgen van Natura 2000; Een quick scan, LEI Wageningen UR; For the benefits, see: Kuik, Onno, Luke Brander & Marije Schaafsma (2006), Globale Batenraming van Natura 2000 gebieden, IVM).

More recently, however, a cohesive cost-benefit analysis was conducted of the Integrated Approach to Nitrogen (in Dutch: Programmatische Aanpak Stikstof: PAS). The PAS will be one of the largest investments associated with Natura 2000 in the years to come. The Netherlands has adopted the PAS to bring nitrogen deposition to a halt in nitrogen sensitive Natura 2000 areas. The PAS is due to be implemented in 2015. Designed to guarantee fulfillment of the Natura 2000 objectives, the PAS also creates room for economic development. It uses an inter-governance approach across all sectors and areas, and includes analysis of scenarios for emission reduction, based on generic measures. It also features an additional national package of measures for the agriculture sector, and measures at the provincial, regional and local levels, such as habitat restoration measures.

Leneman et al (2012) estimated the benefits and costs of the PAS. Their study compares a scenario with the PAS to one without it; in both scenarios, Natura 2000 policy remains unchanged. The largest benefit is the increased room for economic development in the agricultural sector, particularly, cattle farming (see table 5). The largest costs are related to restoration management, hydrology and other local measures in nature areas (borne by the government). Furthermore, source-based national and provincial measures, aimed to reduce the nitrogen emission from the agricultural sector, also account for a considerable share of the total costs (borne by the agricultural sector). All in all, benefits exceed the costs by approximately € 106 to € 203 million per year (see table 5).

Table Y1.5. Benefits and costs of PAS, 2013-2020 (in € million per year)

Benefits	**€ million per year**
Agricultural sector	173 – 265
- Cattle farming	122 – 209
- Pig farming	28 – 43
Administrative burden of agricultural sector	1
Administrative burden of industry	13
No recovery management	16 – 21
Mitigation costs for roads	Pro memoria
Industry	Pro memoria
Total benefits	**202 – 300 + p.m.**
Costs	**€ million per year**
Restoration management	27
National PAS measures	21
Provincial PAS measures	5
Monitoring	1
Hydrology measures	34
Other local measures	8
Total costs	**96**
Benefits minus costs	**106 – 203 + p.m.**

This summary of the costs and benefits reflects the situation for the Netherlands as a whole[46]. However, the cost and benefits are unevenly distributed and at the local level the balance will vary. For example, the cost benefit analysis for the Natura 2000 site of Engbertsdijksvenen shows that in this area the costs exceed the benefits[47]. At the Natura 2000 site of Wierden it is the other way around: benefits exceed the costs[48].

[46] Leneman et al. 2013
[47] Reinhard et al. 2014: MKBA Engbertsdijksvenen.
[48] Reinhard et al. 2014: MKBA Wierdense Veld

Y.2 - Are availability and access to funding a constraint or support?

This question focuses on the proportion of identified funding needs that has been or is being met by EU and Member State funding, respectively, the extent to which the level of available funding affects the implementation of the Directives and enables the achievement of their objectives (as set out in Annex I to this questionnaire), and the extent to which initial funding allocations for nature under EU funding instruments were used as well as any factors which may have favoured or hindered access to and use of funds. In your answer please consider whether funding constraints affect costs or create administrative burdens (eg as a result of limitations on guidance or delays in decision making).

Answer:

Generally, the availability of and access to funding serves to support the implementation of the Nature Directives. To ensure favourable conservation status for its species and habitats, the Netherlands has the option to cover part of these costs by drawing on several European Funds, in combination with Dutch Government and Provincial funding.

Leneman et al (2009, see Leneman, H.; Bogaardt, M.J. ; Roza, P. (2009), Costs of and public funds for Natura 2000 in the Netherlands, The Hague, LEI Wageningen UR; http://edepot.wur.nl/14589) estimated that from 2007 to 2013 some € 1.0 billion would be available from funding sources. About € 100 million from EU funds, approximately € 400 million from Dutch government funds and some € 500 million from Provincial funding. All in all, roughly 10% would be covered by EU funding and 90% was funded by the Dutch government and Provincial funding (see also table C7.1 under question C.7).

In the 2014-2020 period, € 280 million of € 2.905 billion will be covered by EU funding; this is also roughly equivalent to 10% of EU funding (see table Y1.3 under question Y.1).

Y.3 - If there are significant cost differences between Member States, what is causing them?

This question seeks to understand the factors that affect the costs of implementing the Directives, whether there is evidence of significant cost differences between Member States, and the causes of these cost differences. In your answer, please describe the cost differences and the reasons for them (e.g. whether they arise from specific needs, circumstances or economic factors), supported by quantitative evidence. Do these differences lead to differences in impact? Please note that Question Y.5, below, focuses on good practices in keeping costs low. For this Question Y.3 we are interested in evidence of overall differences in implementation cost (see typology of costs in Annex II to this questionnaire) along with the reasons for them.

Answer:

We cannot answer the question on whether there are significant cost differences between member states. The international research being conducted for this fitness check is collecting information from different countries and may provide insight into this matter.
In our response to question S.3, we described the context for implementing the Nature Directives in the Netherlands as follows: "In past centuries, almost every square meter of the Netherlands has been reshaped, on land and in water. Despite this, and sometimes because of this, the country's nature is of international importance. At the same time, the Netherlands is a densely populated delta that hosts numerous activities, including intensive agriculture, transport infrastructure, energy intensive industries, water management and recreation. The country's socio-economic activities and nature management are strongly interwoven in a small area and often occur in the same areas. Given these overall conditions, effective and efficient nature policies and legislation are imperative for nature protection. The environmental conditions of plant and animal species could easily fall under pressure, and it is difficult to maintain them or steer them into a favourable conservation status without risking considerable consequences for other actors and activities. Thus, the effectiveness and the efficiency of that legislation are constantly being put to the test. This has also led to a high number of court cases, resulting in legally binding rulings. As a result, the implementation of Natura 2000 has become a very administrative and legal undertaking. That, in turn, has influenced the progress reached at the level of the strategic, target and operational objectives."

This context has influenced the costs, the types of costs and the levels of the different types of costs that are incurred in implementing the BHD in the Netherlands.

References:

- PBL 2011, Natura 2000 in Nederland. Juridische ruimte, natuurdoelen en beheerplanprocessen.
- Min EL&I, 2011. Implementatie Natura 2000 in Nederland. Analyse naar aanleiding van het Regeerakkoord en de motie van der Staaij c.s. naar nationale koppen, rek en ruimte in de Natura 2000-implementatie.
- Arnouts, R.C.M. & F.H. Kistenkas (2011). De deur klemt; Nederland op slot door Natura 2000: de discussie ontrafeld, WOt-paper 7. WOT Natuur & Milieu, Wageningen
- Arnouts, R.C.M. & F.H. Kistenkas (2011). Nederland op slot door Natura 2000: de discussie, ontrafeld. Bijlage bij WOt-paper 7 – De deur klemt, WOt-werkdocument 236. WOT Natuur & Milieu, Wageningen

Y.4 - Can any costs be identified (especially regarding compliance) that are out of proportion with the benefits achieved? In particular, are the costs of compliance proportionate to the benefits brought by the Directives?

Please provide any quantitative evidence you may have demonstrating that the costs of implementing the Directives exceed the benefits. Do the Directives require any measures which give rise to significant costs but which bring about little, or only moderate benefits?. If so, please explain the extent to which any imbalances are caused by the Directives themselves, or by specific approaches to implementation.

Answer:

There are no recent cost-benefit analyses of the complete implementation of the BHD at the national level available. However, data of some elements of the implementation strategy data are available. Examples of cases in which the costs exceed the benefits are discussed below.
For costs related to administrative burdens, see question Y.7.

<u>The Integrated Approach on Nitrogen (PAS) in the case of the Natura 2000 Engbertsdijksvenen.</u>
A major element in the Netherlands' implementation strategy is a programme called the Integrated Approach to Nitrogen (PAS) (see also Y.1). The analysis of the Agricultural-Economic Institute (LEI) on the social-economic perspectives of the PAS[49] shows that the effects of this programme on the social and economic development at the national level range from largely positive to neutral (see also question Y.5).However, this report also indicates that the costs and benefits are fairly unevenly distributed.
An example of the uneven distribution of costs and benefits is case of the Natura 2000 site, Engbertsdijksvenen. The cost-benefit analysis done by the LEI[50] showed that within a 5-km radius zone of this Natura 2000 site, the costs exceeded the benefits by about €5,100,000. A large portion of these costs resulted from the need to introduce measures on approximately 250 ha of agricultural lands outside the Natura 2000 site in order to improve the quality of the nature within that site. These measures also have a large impact on local agriculture. Because of the large local impacts, resistance arose from certain local stakeholders.

The case Engbertsdijksvenen is also discussed in Broekmeyer et al[51]. It is concluded that it is difficult to state that in this case this high local costs bring about too little or only too moderate benefits. It can be confirmed that it will be difficult to realise the BHD-objectives for this site, the conservation of raised bogs, and that it is not certain that the objectives will be fully reached. Because of this, some stakeholders contest the cost-effectiveness of the investments to conserve raised bogs at this site. They argue that in nearby Germany the possibilities to conserve raised bogs are better. Also the proposed conservation and restoration measures are questioned. Some of the present land users argue that alternatives are possible with lower impact on agriculture. The province and the local stakeholders have agreed to investigate this issue during the preparation of the Natura 2000 management plan.
It appears that in cases like this, it is very important to be able to explain to stakeholders and the public that: (i) the Netherlands, because of the European state of the species or habitat, actually has an important responsibility to protect these specific species or habitat types at those designated sites, and (ii) that the envisioned results are truly feasible in the designated site and could contribute significantly to an overall favourable conservation status. In these cases, it is justified and effective to invest a great deal of effort.

<u>The case of the black grouse in the Natura 2000 site Sallandse Heuvelrug</u>
In 1974, the national black grouse (*Tetrao tetrix*) census was started. At the time, 450 male birds were counted, a fraction of the number in the 1950s (which then ran into the thousands). Over recent decades, much has been invested in the management of Sallandse Heuvelrug National Park (also a Natura 2000 site). According to the site managers, this was an investment in the habitat of heathland species with the black grouse as its emblem. At the same time, studies were conducted into such aspects of the population dynamics as breeding success, survival and genetic variation. All this proved insufficient for an increase in black grouse population numbers. As a result of genetic impoverishment, poor habitat quality and possibly climate change, the species seems to be doomed. In 2012, two male birds were counted in Sallandse Heuvelrug. In 2013, it was agreed that the objective for black grouse needed to be reviewed, taking into account the possibility that the species would soon be extinct.
This case is an example of a long-term investment of time, effort and money that yielded little to no success.

[49] H. Leneman et al. Sociaal economisch perspectief van de PAS; social economische effecten van de Programmatische Aanpak Stikstof, LEI, 2013.
[50] Reinhard et al. 2014. MKBA Engbertsdijksvenen.
[51] Broekmeyer et al., 2015. Rapportage analyse cases-onderzoek implementatie Vogel- en Habitatrichtlijn. Alterra-rapport. *In preparation*

Looking back, one could conclude that the costs largely exceeded the benefits. The question is: could this result have been expected from the outset? Some stakeholders argue that cost-effectiveness should be a more important factor in cases like this. Although all the costs in this case were intended to improve the situation ofthe black grouse, also other species and the heathlands habitats profited of the measures, too. This case is discussed in Broekmeyer et al.

Y.5 - Can good practices, particularly in terms of cost-effective implementation, be identified?

Here we are looking for examples of where the objectives of the Directives are being met more cost-effectively in some Member States or regions than others, and the reasons for these differences. It is important to understand whether they are due to particular practices (rather than, for example, differences in needs, circumstances or economic factors) that have kept costs relatively low. We would welcome examples of differences in practices between Member States in implementing the requirements of the Directives, including initiatives designed to achieve cost-effective implementation, and evidence of whether these initiatives or practices have reduced costs in certain Member States or regions.

Answer:

No recent cost-benefit analyses are available for the full implementation of the BHD at the national level. However, data are available for some elements of the implementation strategy.

The Integrated Approach on Nitrogen (PAS)
A major element in the Netherlands' implementation strategy is a programme called the Integrated Approach to Nitrogen (PAS). This approach is considered as "a good practice." In 2010, it was decided that the relentlessly persistent problem of nitrogen deposition could only be resolved by an Integrated Approach aimed at achieving positive results for nature and for economic development in the Netherlands. In took 5 years to develop the PAS, and its implementation will start in 2015. The win-win element has been crucial to its success.
A cost-benefit analysis has been undertaken at the national level for this programme by the Agricultural-Economic Institute (LEI). The main conclusion and results are presented in Y.1. However, the benefits and costs have been unevenly distributed between sectors, regions and Natura 2000 sites. See question Y.4 for the case of Engbertsdijksvenen.
It can be argued that, in many cases, the PAS is a good practice, because of the win-win aspect and the positive balance of the cost and benefits at the national level.

Codes of conduct and common exemptions
The BHD in the Netherlands have prompted the establishment of codes of conduct and charters in several sectors (See also S.4). These are considered as cost-effective strategies in implementing the BHD, because they provide derogations on some aspects of species protection. On the other hand, if these codes of conducts and charters are implemented locally and not national, it may cause a difference in level of playing field. If the exemption does not cover all aspects of the activity, still permits have to be applied for and then it causes stacking of policy.
Examples:

- Codes of conduct: They have been found to be cost-effective instruments in fulfilling obligations to care for species. These obligations are laid down in the Dutch Act for the Protection of Flora and Fauna. Normally, companies and organizations need to apply for an exemption for sustainable exploitation and management of species protected under the BHD. However, companies and organisations that operate according to codes of conduct do not need to apply for such exemptions. Codes of conducts are made for various sectors (13) and municipalities (21). For example there is a code of conduct for the water boards on maintaining the watercourses, about the allowed time of year and the phasing and execution of management measures[52]. Based on estimates by the Ministry of Economic Affairs, this provision reduces administrative burdens as it eliminates the need to process some 1200 exemption applications per year.
- There are also agreements that are not implemented in law: "S(up)port for Nature" is a framework agreement between site managers and the organizers of sports events aimed at preventing damage to the soil and nature, preventing inconvenience to residents and visitors and promoting the safety of sports events. Another recent development in the Netherlands is the establishment of a convenant for recreation on Lake IJssel by numerous water recreation stakeholders working in cooperation with nature management organizations. Administrative organisations such as water boards, road management and NGOs also have codes of conducts for nature management(see also S.4);
- Another cost-effective approach to species protection is the preparation and implementation of species management plans (SMP) for common species that are strictly protected under the Directives (see also Y.7 and case "algemene vleermuizen" in Broekmeyer et al.[53]). SMPs include measures to ensure a favourable conservation status for the species concerned, and at the same time, to establish rules and conditions for the development of socio-economic activities in the area. The SMP can function as a sound basis for issuing generic exemptions for the development of socio-economic activities. The implementation of an SMP serves

[52] See for example case 4: restoration of small streams in the province of Limburg IN: Netwerk Groene Bureaus, 2015. Experiences of Dutch consultancies with the Habitats and Birds Directive. Odijk. *In preparation*

[53] Broekmeyer et al., 2015. Rapportage analyse cases-onderzoek implementatie Vogel- en Habitatrichtlijn. Alterra-rapport. *In preparation*

to create a surplus of habitat for the protected species. In this respect, SMPs mitigate in advance, or compensates for the negative effects of implementing a spatial plan and of socio-economic activities. The SMP is a promising tool, especially for protected species that are rather common and widespread in cities, such as some bats. However, SMPs have not been generally implemented so far.

Spatial development and land consolidation)

A good example of an integrated approach for the achievement of the objectives of nature policy have been the integrated programmes for land consolidation ("ruilverkaveling"). These programmes have been important for the implementation of the National Ecological Network. In these programmes typically a region is redeveloped and reparcelled. The location of nature, agriculture, industrial areas, houses etc. including the courses of canals and brooks, roads and landscape features are planned in an integrated way where interests of all stakeholders are taken into account. Owners can (voluntary) provide their parcels and apply for other parcels. In this way for example farmers can get farmland closer to the farm, they will have fewer problems with water or they gain better grounds and get rid of poorer grounds that then can be used for nature. It gives many possibilities for nature (coherence of nature areas, regaining of natural courses of brooks, possibilities for adapting the (ground) water regimes, etc.). On the other hand, if (nature) objectives are already set on parcels, the exchange will be harder. If necessary to complete the program, possible remaining unwilling land owners can be forced in the process.

Participatory approaches

In some cases, participatory approaches haven been successfully applied. See for more elaboration of the cases Broekmeyer et al[54]:

- Oldematen: the site is a complex of grasslands with broad canals and at some places transition bogs. The agricultural grasslands are very important for meadow birds. The initial opposition of the stakeholders is converted to a chance for management of the site in combination of the current agricultural use. In the land reform the nature area is made more robust and the water management is improved for both nature and agriculture. Farmer’s collectives now are able to fit nature conservation into their farming.
- VIBEG: an agreement in the coastal zones is made to combine nature and economy (fisheries). Fishery organisations agree to close areas for fisheries and nature organisations then will not take legal actions anymore. The fishery sector in this way gets time to make the fishing techniques more sustainable. The effectiveness of the closing of areas however is disputed by individual fishermen.

[54] Broekmeyer et al., 2015. Rapportage analyse cases-onderzoek implementatie Vogel- en Habitatrichtlijn. Alterra-rapport. *In preparation*

Y.6 - What are likely to be the costs of non-implementation of legislation?

This question seeks to gather evidence on the impacts of non-implementation of the Birds and Habitats Directives, and its associated costs, whilst assuming that some measures would be taken to conserve nature. Taking into account current national measures that do not arise directly from obligations under the Directives, please describe and, if possible, quantify, with supporting evidence, the potential impacts and associated costs of non-implementation of the Directives, for instance on: habitats and species of Community interest and wider biodiversity; ecosystem services (eg in relation to carbon sequestration, areas for recreation); and economic and social costs (eg jobs and health).

Answer:

First of all, it should be noted that the Netherlands regards this question as highly speculative. For that reason, the answer will also be somewhat speculative in nature. Starting in 1990, the Netherlands began investing considerably in the acquisition of land, land conversion into nature areas, the creation of ecological corridors and nature conservation management within the National Ecological Network (NEN). The NEN is the national long-term project for the conservation of biodiversity by means of creating an area of interconnected nature reserves, thereby increasing the living base for species and promoting exchange between populations (Gaaff & Verburg, 2007).

Since the NEN is based on national policy, it is reasonable to assume that this project would be carried out regardless of the implementation of the Birds and Habitats Directives. As noted under question Y.1, there is a considerable spatial overlap between the National Ecological Network (NEN) and the Natura 2000 sites. Apart from a few small boundary differences (mainly agricultural land as SPAs), all Natura 2000 sites fall entirely within the NEN[55]. In many cases, Natura 2000 site objectives are similar to the NEN nature objectives for the same area (MNP, 2005). It is safe to assume that if the Nature Directives had not been implemented, Natura 2000 would not have been implemented either. Should that have been the case, the NEN still would have been developed. Possibly, however, this would have been on a smaller scale, and the environmental conditions may have been less favourable (since efforts, such as PAS, might not have been taken).
Table 2 under question Y.1 presents the expenditures on NEN in the 1990-2011 period.

The level of protection for the NEN would probably have been lower than it is now under the Nature Directives (see table 1 in question Y.1). Furthermore, as questionsY.2 and C.7 clearly reveal, less EU co-financing would have been available. Consequently, one can assume that the objectives of ensuring a favourable conservation status for the species and habitats would have been less stringent and/or would have been fulfilled at a later date.

For more information on the similarities and differences between NEN and Natura 2000 see AV.1.

[55] Veen & Bouwma, 2005

Y.7 - Taking account of the objectives and benefits of the directives, is there evidence that they have caused unnecessary administrative burden?

This question seeks to gather evidence of any unnecessary burden arising from the administrative requirements of the Directives for different stakeholders (MS authorities, businesses, landowners, non-governmental organisations, citizens). Administrative burdens are the costs to businesses and citizens of complying with information obligations resulting from legislation, and relate to information which would not be collected in the absence of the legislation. Some administrative burdens are necessary if the objectives of the legislation are to be met effectively. Unnecessary burdens are those which can be reduced without affecting the objectives. Quantitative evidence may include typical requirements in terms of human resource inputs, financial costs (such as fees and wages), delays for development and other decision-making processes, and other measures of unnecessary or disproportionate burden the administrative costs in terms of effort and time, and other inputs required, financial costs, delays and other measures of unnecessary or disproportionate burden.

Answer:

In the process of preparing the new Dutch Nature Protection Law, in 2015 SIRA-Consulting has been conducted an independent research for the Dutch Government to get insight in the administrative costs for enterprises and citizens related to the implementation of the present and future nature laws. The research has resulted in the report “Regeldrukteffecten Wetsvoorstel Natuurbescherming”56.

In the table below main results concerning the costs of the implementation of the nature law(s) are presented.

	Costs for enterprises			Costs for citizens		
Situation	Administrative burdens	Compliance costs	Supervison/ control	Administrative burdens	Compliance costs	Supervison/ control
Present	€ 39.120.000	€ 16.130.000	€ 711.700	€ 3.560.000	€ 7.058.400	€ 24.800
Proposed (new nature law)	€ 38.855.400	€ 16.050.000	€ 711.700	€ 3.410.000	Minimum: € 8.698.400 Maximum: € 15.628.400	€ 24.800
Difference	€ 264.700	€120.000	€ 0	€149.400	Minimum: € 1.640.000 Maximum € 8.570.000.	€ 0

About the causes of the costs, in the report the followings is stated:

- the main administrative burden for enterprises is a consequences of the obligation of obtaining permits related to the protection of Natura 2000 sites. This is a direct consequence of the implementation of the habitat directive, article 6 (6.2 en 6.3).
- the rise in the compliance costs for citizens related to obligations related to hunting and controlling of damage causing animals. These higher costs are associated with the national legislation. In the new nature law there will be a provision to limit the costs.

Administrative burden for permits
The calculated amount is a factual amount, without an assessment of the necessity of the burden. A larger portion of the amount is due to the costs of ecological surveys. These surveys are mandatory in the process of applying for a permission or exemption under nature legislation. In some cases these costs can be in comparison very high, especially for relatively small enterprises with relatively small project.
A specific case is the strict protection of common species and therefore the obligation to get a permit for species that do not actually need it. See Broekmeyer et al, case “algemene soorten”[57]. The strict protection provisions for common species require planning and spatial intervention projects to conduct studies to determine potential effects on species populations. This is felt to be an implementation burden by such parties as municipal councils, who draw up zoning plans and demonstrate their feasibility under the Flora and Fauna Act and initiative takers who implement the measures and apply for exemptions under the Flora and Fauna Act. This protection applies to common species, such as the common pipistrelle bat and, due to the scope of the Birds Directive. common birds species. Likewise, for HD-listed species, the provisions require the entire species to be taken into account, even in cases where only some subspecies may be under threat. An example is the Jersey Tiger, *Euplagia quadripunctaria*, of which the subspecies that occurs in the Netherlands is not under threat, is quite common,

[56] SIRA Consulting B.V,2015, Regeldrukteffecten Wetsvoorstel Natuurberscherming
[57] Broekmeyer et al., 2015. Rapportage analyse cases-onderzoek implementatie Vogel- en Habitatrichtlijn. Alterra-rapport. *In preparation*

and can even be found outside Natura 2000 sites. Nonetheless, every species must be included in every evaluation. The same is true of *Cottus perifretum,* of which there appeared to be more subspecies since its inclusion on the HD list. Some of these subspecies are highly invasive, though *Cottus perifretum* is quite rare. (See Y.5 for examples of approaches to limit these costs).

Assessment of plans and projects
Spatial planning is important for the achievement of the Directive's objectives in the Netherlands. In practice, however, the appropriate assessment of plans as required in article 6 (3) of the Habitats Directive can be problematic. The level of abstraction for the plans and the period in which they remain in effect (10 years in the Netherlands for spatial development plans) are unsuited to the absolute certainty (no reasonable scientific doubt), required by this provision that the integrity of the site will not be adversely affected. In accordance with case law, the potential effects of each theoretically possible development that could arise from the plan must be taken into account and assessed as if it were a "project." This is despite the fact that, in the future, every project must be assessed before being implemented, as stipulated by the requirements in article 6 (3), a provision aimed at preventing any potential adverse effects in the Natura 2000 sites. The fact that activities are assessed two times at both level of plan and project causes administrative burden.
For the example of "Maasvlakte 2" see S.3.

Uncertainties in procedures for permission causes delays and costs increases
Another factor sometimes contributing to administrative burden is the issue of the uncertainty regarding the required depth of the ecological research. This uncertainty concerns the level of detail, reference periods, extent of the surroundings etc[58].
Broekmeyer et al. 2015 discuss two cases in which this problem occurred; the case "VIBEG" and the case "Enkhuizen Compagniehaven". In the last case, a recreation entrepreneur wanted to build a landing stage for boats in an area protected for amongst others grebe. In this case there was much confusion about the procedures and the researches to be conducted. The procedures took 7 years.

[58] Netwerk Groene Bureaus, 2015. Experiences of Dutch consultancies with the Habitats and Birds Directive. Odijk. *In preparation*

Y.8 - Is the knowledge base sufficient and available to allow for efficient implementation?

This question seeks to establish the extent to which adequate, up-to-date and reliable information required to implement the Directives efficiently is available, such as information related to the identification, designation, management and protection of Natura 2000 sites, the choice of conservation measures, the management and restoration of habitats, the ecological requirements of species and the sustainable hunting/use of species, permitting procedures, etc. Please indicate key gaps in available knowledge relating to your country and, if relevant, at biogeographical and EU levels. If possible, please provide evidence that inadequacies in the knowledge base have contributed to the costs and burdens identified in previous questions.

Answer:

In general, Dutch society is very knowledgeable about nature. The Netherlands maintains a monitoring scheme on national trends in species, runs a vast network of professionals and volunteers who deliver data on the distribution of species and habitat types, and has compiled a history of research on restoration and development in nature (e.g., the OBN network). Taken together, these resources provide enough information for decision-making on the designation, management and protection of Natura 2000 sites on land.
This knowledge base however, is sometimes still insufficient and can cause problems. Two issues are discussed below.

<u>Knowledge base for the management of areas and species in marine areas</u>
In general, the knowledge base for the establishment of protected marine areas is thin. Based on the definition of the habitats (mostly defined by abiotic characteristics, such as the presence of a particular sediment, a certain water depth and influence by tidal movement), the task of locating the general presence of the marine habitats is (fairly) easy. On the other hand, there is very little information on the biological aspects of the habitats. For instance, which species are present in the habitat? Which species can be defined as “typical species”? In other words, which species can be identified as having been present in a particular habitat when it was in a favourable conservation status? In what density do the species occur? How do we assess and valuate their current presence? Little is also known about the direct and long-term effects of certain human activities on habitat characteristics. This creates a great deal of uncertainty regarding the development of appropriate measures to retain or restore a favourable conservation status.
The task of designing adequate measures with a high certainty of effectiveness is one that calls for more knowledge. The problem encountered here is that marine habitats occur in a wide range, most often covering several hundred square kilometres, and – not surprisingly – mostly occurring below a deep body of water. It is impossible to know as much about the marine habitats as is known for the terrestrial habitats - at least, not without incurring disproportionate costs. The investment required would simply not be cost efficient, as it would involve high uncertainties and, consequently, difficult stakeholder discussions about the facts and figures.
To lack of knowledge played a large role in the so called VIBEG-agreement. This agreement to regulate fishing in protected areas in the North Sea coastal zone was signed in 2011 by the Dutch government, the fishery sector and nature organisations. As a part of this agreement research has been conducted to fill the knowledge gaps. However, the research has not led to the strengthening of the agreement because the research results are heavily disputed. As a consequence, the agreement has come under pressure and the parties concerned are involved in legal procedures. See Broekmeyer et al for more details[59].

<u>The assessment of significant effects</u>
Another key gap in information, mostly in the permitting procedures, is the information on the significant (negative) impact of specific activities or projects on species and habitat types. Ecological research does not always lead to absolute statements required by the legal process. Therefore, in several cases it is not possible to properly assess if an activity or a project does or does not have significant negative impacts on a BHD-value[60]. As the BHD asks to exclude significant negative effects, in those cases the precautionary principle prevails and the permit will not be issued. The fact that this occurs on the base of lack of knowledge is frustrating to the ones undertaking the activity or project.
Examples include disturbances, such as those caused by recreational activities, and the risk of windmill accidents involving birds and bats. Another example is the narrow-mouthed whorl snail (*Vertigo angustior*) in the dunes area: the restoration of the natural processes, such as shifting in the dunes, is very important to long-term conservation of the ecosystem. Knowledge of the ecology and habitat of the *Vertigo angustior* is insufficient to be able to guarantee that the restoration of natural dynamics will have no negative effect on the species.

[59] Broekmeyer et al., 2015. Rapportage analyse cases-onderzoek implementatie Vogel- en Habitatrichtlijn. Alterra-rapport. *In preparation*
[60] Netwerk Groene Bureaus, 2015. Experiences of Dutch consultancies with the Habitats and Birds Directive. Odijk. *In preparation*

Part of the problem is the fact that the definition of the species' habitat is often unclear: what comprises part of the habitat and what does not? What should the quality be, and when is the area insufficient? And when does the species "leave" due to the problem of poor quality or disturbances?

Another problem is possibly that the assessments are not done the same way in the different Member States of the EU. Therefore, some stakeholders argue that on a European level standards should be set. For example, on a European level critical deposition values for each habitat type have been set. It should, therefore, be possible for experts to also reach a common understanding on a European level to when a contribution to eutrophication has a significant effect on a habitat type. The current difference between Member States regarding the threshold for significance (for instance 0.05 mol/ha/yr in the Netherlands[61], and 21,4 mol/ha/yr in Germany[62], both based on scientific knowledge) results in additional administrative burden and legal uncertainty for project developers. If there is more clarity regarding the threshold, it is also possible to limit the necessary assessments to those areas where a significant effect cannot be excluded.

<u>The determination of compensating measures</u>
The lack of knowledge does not only concern the assessment of significant effects of projects, but also those of compensating measures.

Broekmeyer et al.[63] discus several projects where the lack of knowledge or the fact that knowledge is contested causes problems for the decision making on the management of the BHD-values, the assessment of significant negative effects and the determination of compensation of measures (for example the cases "Enkhuizen Compagniehaven" and "Hondsbossche Zeewering").

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[61] http://www.rijksoverheid.nl/documenten-en-publicaties/besluiten/2014/10/09/ontwerpbesluit-grenswaarden-programmatische-aanpak-stikstof.html

[62] see Bundesverwaltungsgericht 9A25-12 from the 3rd of April 2014.

[63] Broekmeyer et al., 2015. Rapportage analyse cases-onderzoek implementatie Vogel- en Habitatrichtlijn. Alterra-rapport. *In preparation*.

Relevance

Relevance concerns the extent to which the objectives of the nature Directives are consistent with the needs of species and habitats of EU conservation concern. The question of relevance relates to whether the objectives of the legislation are still necessary and appropriate; whether action at EU level is still necessary in light of the challenges identified and whether the objectives and requirements set out in the EU nature legislation are still valid.

R.1 - Are the key problems facing species and habitats addressed by the EU nature legislation?

By 'key problem', we mean the main pressures and threats that species and habitats face, which are significantly widespread in terms of their incidence (geographic extent) and/or magnitude/severity. Do the Nature Directives respond adequately to these problems? Are the specific and operational objectives of the Directives suitable in light of the key problems identified? Please justify your answers with evidence.

Answer:

<u>Strategic objectives: to maintain (or restore) natural habitats and population of species</u>

In general the directives address the key problems for species and habitats, such as poor environmental conditions, habitat fragmentation, disturbances, killing and other factors that negatively influence the population of rare and vulnerable species and habitat types.

However: the regulation is focused on the assessment of significant negative effects on the species and habitat types. This focus results in the prevention of deterioration of individual species at specific locations instead of on the favourable conservation status on the long term and on a national/biogeographical level. This means that species must be fixed at fixed locations. Because not all biodiversity is fixed in one place the directives seem to go beyond their overall objective to ensure biodiversity. Below are some examples of cases where the fixation of nature values does not work out well.

Succession and restoration of natural processes

The Nature Directives give, within constraints, room for (natural) dynamics. However, due to national and European court law, the implementation of the Nature Directives has resulted in a strong focus on the protection of specific species and habitats in specific sites instead of on the favourable conservation status on the long term and on a national/biogeographical level[64]. This gives the impression that the Directives do not take into account the dynamics of an ecosystem. More possibilities for some trade off within a wider frame than the exact current location would give more room for dynamics. Examples are:

- A major intervention is needed in the SPA Oostvaardersplassen, to prevent the decline of bird species in the natural development of the marsh area.
- In the dunes, dynamics form an important factor in the sustainable conservation of the area. The conservation of fixed surfaces of dune habitat types (2110-2190) at fixed locations is at odds with the dynamic character of the dune ecosystem.
- In one site, habitat types (and species) that benefit from specific measures and those that benefit more from natural processes often occur together. This is not only the case in the dunes, but also in the river systems (case "Loevestein"[65]) and in larger nature areas on higher sands (e.g. Veluwezoom). This results in site management problems: for example, extensive year-round grazing by semi wild horses and cattle is used to create a more natural situation. Habitat types and species that profit from specific management (such as mowing) may come under pressure.
- In Grevelingen, due to measures in the context of the WFD there are plans to partially restore the original fresh and salt water transitions. Because salt water enters the Grevelingen and natural dynamics again are enabled, the water quality in this fresh water lake will improve and the area can be more easily maintained in better condition. However, the salt influence could put the population of the fen orchid (*Liparis loesii*) (objective for HD/Natura 2000) at risk. As a result the final implementation of the plan is uncertain;
- In Natura 2000 site Kampina the problem is that the Molinia meadows (6410) are in a poor condition because of the unnatural hydrological situation. The restoration of the natural water system is necessary to improve the habitat type in the long term. However, in that case the habitat type will be inundated by too eutrophic water first and will temporarily deteriorate.
- Other examples are the cases "ANT IJsselmeer" and "Vismigratierivier" in Broekmeyer et al. (see for a

[64] This is reinforced by the ruling of the European Court of Justice in the case Briels / A2. See also a.o. Bastmeijer & Willems (2010)

[65] Broekmeyer et al., 2015. Rapportage analyse cases-onderzoek implementatie Vogel- en Habitatrichtlijn. Alterra-rapport. *In preparation*

short description S.3).
Zin van Micheal over wider frame & guidance

Climate change
In 2010, the Netherlands Environmental Assessment Agency (PBL) researched the effect of climate change on nature in the Netherlands. The report concluded that nature policy should focus on proper functioning of the ecosystems in order to respond well to climate change. It is very important that environmental and water conditions improve, so that occurring values become resilient. This is covered in the Directives. However, sometimes it is necessary to bring more dynamics into the system to establish this, e.g. the blowing in of calcareous sands or the flooding of an area (see also above). Connecting sites, such as in the Natura 2000 network, will absolutely contribute to the adaptive capacity of natural systems. However, it is also important to look beyond the borders of each Member State, so the network can function as climate corridors over larger distances. Because species will migrate along these corridors, the report concludes that it is not realistic in nature policies and site management to focus on the permanent survival of specific species in fixed places. According to the general objectives of the Directives, this should be possible. However, experience shows that, legally, the Directives are interpreted very strictly due to national and European court cases[66]. It is questionable, therefore, whether a shift in species due to climate change will hold in court.

Migrating species
One specific problem relating to climate change that the Directives cannot handle are changes that take place as a result of weather changes. The Netherlands is a very important base for migrating birds. Many species look to the Wadden Sea, Lake IJssel or delta regions as safe havens with an abundant food supply, where they can stay the winter, or put on weight and rest during their journey. However, the numbers of species, such as wintering whooper swan (*Cygnus cygnus*), bean goose (*Anser serrirostris*) and smew (*Mergellus albellus*) are strongly correlated with winter temperatures. When temperatures in the northern regions stay relatively high in winter, these flocks stay north in larger numbers. During severe winters, the populations in the Netherland increase again. On the long term, as a result of the climate change, these species will come less often to the Netherlands. Other species, such as the pink-footed goose (*Anser brachyrhynchus*), wigeon (*Anas penelope*) and tufted duck (*Aythya fuligula*), have already adapted their routes and/or winter farther north permanently due to the warmer winters. Thus, a decline in numbers at a particular site may be caused by a range of internal and external factors, which are seldom fully understood. Even if the habitat of a species at a site is in good condition and well managed, the numbers present at the site may decline in the long term due to a switch to other sites (where conditions may be more favourable), or due to an overall decline in (breeding) population numbers. Declining numbers do not necessarily denote habitat deterioration. It is difficult to take the mobility of birds fully into account in the assessment of projects under article 6(3) of the Habitats Directive. This is particularly relevant if habitat availability is not a limiting factor at the population level, (as is presumably the case for wintering geese, which, in the Netherlands, depend largely on agricultural areas for their food). A decrease in one site is not a problem if the species is not decreasing at the European scale (and/or at the Flyway population scale).
Another problem for migrating species is if they are hunted elsewhere on their migration route (like the bean goose or *Anser fabalis*), the habitat in a wintering site will not be a major factor in the potential deterioration of a population.

Biodiversity is more than just Natura 2000
The focus on Natura 2000 (or the species and habitat types of the Annexes) sometimes limits opportunities for other nature types. Since the designation of Natura 2000 sites more money and efforts goes to these sites and less to other nature areas. In the Natura 2000 sites sometimes conscious decisions have been made to favour Natura 2000 targets at the expense of other nature targets at the site. An example is the SPA “Abtskolk en de Putten”, where objectives for the lesser white-fronted goose (*Anser erythropus*), formulated as a surface of habitat, limit the further development of also ecologically important and rare brackish grasslands in the site that are an objective in the NEN. An objective on the ecosystem level would be more appropriate for the site’s long-term conservation quality and potential.
Also compensation is mainly aimed at Natura 2000 values. An example of this is in the reconstruction of the Hondsbossche Zeewering (see Broekmeyer et al. 2015) where the loss of habitat of the oystercatcher in Wadden Sea is compensated, while the unique salty habitat of the stony substrate on the bottom of the dike is not, because there are no values from the BHD.

The Netherlands is also very important for meadow birds: migrating birds that bring up their young on relatively wet and extensively used grasslands in open areas. Natura 2000 and the Birds Directive have relatively little

[66] A.o. Bastmeijer & Willems (2010)

significance for these birds. The most important sites for these species are located primarily outside the Natura 2000 network and even outside the NEN. Specific meadow bird sites have been designated. Broekmeyer et al. 2015 describe the conservation of meadow birds in the case “Weidevogels”.

In short, biodiversity involves more than what is protected under the Directives. To conserve biodiversity, it is necessary not only to implement the Birds and Habitats Directive, but also the National Ecological Network and agri-environmental measures (PBL, 2011, Bouwma et al. 2009, Vogel et al., 2013).

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R.2 - Have the Directives been adapted to technical and scientific progress?

With this question, we are seeking to examine the implications of technical and scientific progress regarding the habitats and species that the Directive focus on. Please summarise, and provide any evidence you may have that indicates that the annexes listing habitats and species in both Nature Directives are, or are not, sufficiently updated to respond to technical and scientific progress.

Answer:

Annexes

- Some scientific names of species in the Annexes are outdated (e.g. *Maculinea* species, *Stylurus flavipes* and several birds); a check with e.g. Fauna Europaea is recommended.
- In the case of *Cottus gobio*, for instance, (H1163) it is clear that the species consists of several sub-species (C. perifretum etc.); we presume that all "new" species are protected, but that must be made specific in the annexes.
- It is not clear whether or not the question aims at revising the list of habitats and species to be protected. If so, there is much scientific evidence on species that are listed in the annexes, but that not under threat (for example, species that are increasing under climate change) and (many more) species that are under threat, but that are not listed in the annexes (see IUCN Red Lists for EU). To a lesser extent, the same holds for habitat types. If a revision is to be undertaken, it will require a great deal of work!

Other scientific progress

The current approach of the Birds and Habitat Directives, especially as relating to the fixation of individual species, is not sufficient to respond to climate change (PBL 2010, see further R.1).

R.3 - How relevant are the Directives to achieving sustainable development?

This question seeks to examine the extent to which the Directives support or hinder sustainable development, which is about ensuring that the needs of the present generation are met without compromising the ability of future generations to meet their own needs. It requires ensuring a balance between economic development, social development and environmental protection. . In your answer, please provide evidence of the impacts that implementation of the Directives has had in relation to these three 'pillars' of sustainable development.

Answer:

On the general level, the Directives support sustainable development. The Directives enable the implementation of generic measures, such as those for N deposition and fisheries, which help make the agricultural, fishery and other sectors more sustainable (see also S.3 PAS and case "VIBEG" in Broekmeyer et al.[67]). For biodiversity itself, the Directives fulfill a very important role in ensuring sustainability (see, for example, S.2, S.4 and R.1). The Directives make it mandatory for nature and biodiversity issues to be taken into account in projects and plans, where this was formerly not necessarily the case. The problem is, however, that the Directives sometimes hinder sustainable development in the process (see also S.3).

Kistenkas (2013, 2014) found that the current ECJ rulings confirm one-sided testing on narrow and pre-defined conservation objectives, including the matter of site integrity. In light of that, these rulings, may tend to obstruct sustainable growth. These obstructions are caused by the legislative text, as well as its translation and ECJ interpretation. Whereas treaty law and the Green Infrastructure initiative focus on the delivery of ecosystem services and a balancing of social, economic and environmental benefits, the habitats assessment is not a matter of triple P balancing (people, planet, profit). Rather, it is merely one criteria test that can exclude entire clusters of ecosystem services (e.g. provisioning and cultural services) as well as social, other ecological and economic benefits. Only planet (1P) testing could legally rule out triple P (3P) balancing.

Given the number of Natura 2000 sites that are either used for multi-functional purposes, or are located in a multi-functional environment, it is important to create win –win situations to the greatest extent possible. Beneficial investments / developments in an area, however, can be stopped by the Directives because they harm certain values protected under the Directives. At times, this has the potential to jeopardize sustainable development in an area, and sometimes even sustainable conservation of biodiversity as a whole (also not Natura 2000). If projects that the public clearly sees as beneficial to a region's nature conservation and other sustainable development are impeded by nature legislation, of all things, misunderstandings can develop (see S.4 and R.4). Examples are:

- In Grevelingen, due to measures in the context of the WFD there are plans to partially restore the original fresh and salt water transitions. Because salt water enters the Grevelingen and natural dynamics again are enabled, the water quality in this fresh water lake will improve and the area can be more easily maintained in better condition. This gives an opportunity for a tidal power plant in Grevelingen to generate renewable energy. However, the salt influence could put the population of the fen orchid (Liparis loesii) (objective for HD/Natura 2000) at risk. As a result the final implementation of the plan is uncertain.
- Sometimes projects as simple as the construction of a new bicycle path encounter problems. On the edge of the Amsterdam Water Supply Dunes, a (small) loss of habitat for the narrow whorl snail (*Vertigo angustior*) was not legally permissible. However, the outcome resulting from the criteria for "alternatives, imperative reason of overriding public interest and compensation" applied in this case will lead to a situation that is ecologically much less desirable.

Stakeholders in the Netherlands have seen great potential for achieving BHD goals in combination with other public objectives, such as water management, recreation, housing, or integrated area development. In principle, such an approach is cost effective, as investment and management costs for nature can be shared to some extent with other cost carriers. Moreover, the combined approach is important for conserving the Natura 2000 values, as many Natura 2000 sites are either used for multi-functional purposes, or are located in a multi-functional environment. In these contexts, a win –win solution would help strengthen public support for the BHD. However, in practice, the application of such an integrated approach has proven difficult to reconcile with the BHD. A part of the problem is due to the definition and application of the terms "plan" and "project" and the application of the articles 6.1-6.4 in the cases of integrated approaches to sustainable development (including the development of BHD-values). Such integrated approaches – either spatial or thematic (f.e. watermanagment plan or an area development plan ("gebiedsontwikkeling")) - typically consist of a set of interconnected activities.

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[67] Broekmeyer et al., 2015. Rapportage analyse cases-onderzoek implementatie Vogel- en Habitatrichtlijn. Alterra-rapport. *In preparation*

The combined effects of these activities have a nett positive effect on both the BHD-values in the site and the other societal objectives concerned.
However, in the assessment procedures, the integrated programmes/projects are generally split up. The “non-nature components” are considered as plan / project to which articles 6.3 and/or 6.4 have to be applied, and the "nature component" is eventually considered as mitigation or compensation. This "splitting up" hinders the implementation of the integrated programmes / the projects, especially when the BHD-values of a site are not in a favourable condition. Often it appears to be difficult to prove the imperative reason of overriding public interest of the activity, especially when it concerns activities of private parties. Then first measures have to be taken to assure that the good condition of the BHD-values can be reached before the other components of the programme can be implemented. This is not always attractive for both public and private parties and discourages initiators of such integrated projects. In such cases, the BHD limits the possibilities for the realisation of “win-win”-situations that have also nett positive effects on BHD-values.
Broekmeyer et al. 2015 analysed a number of such integrated "nature inclusive" projects in relation to the application of the articles 6.1, 6.3 and 6.4 and the definition of the concepts “plan” and “project” (the case “Hondsbossche Zeewering” (water safety (coast) and BHD-values), the project “Markerwadden” (a.o. recreation, housing construction, BHD-values) the project “Verbreding A2” (infrastructure, BHD values) and case “Stroomlijn” (water safety (rivers), BHD-values)).

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R.4 - How relevant is EU nature legislation to EU citizens and what is their level of support for it?

The aim of this question is to understand the extent to which citizens value the objectives and intended impact of the EU nature legislation. To this end, we would like to obtain information and evidence on the extent to which nature protection is a priority for citizens (e.g. in your country), including in comparison with other priorities; for example whether citizens (e.g. in your country) support the establishment and/or expansion of protected areas, the extent to which they access/use them or; the extent to which citizens are involved in any aspect of the implementation of the Directives (e.g. participation in the development of management plans of protected areas or decisions concerning the permitting of projects which have an impact on protected areas).

Please note that the Birds and Habitats Directives may be relevant to citizens even if they do not actually know of their existence or the existence of the Natura 2000 network.

Answer:

Combined with answer to R5

R.5 - What are citizens' expectations for the role of the EU in nature protection?

The aim of this question is to obtain information and evidence on questions such as: whether citizens submit complaints or petitions to the EU requesting its involvement on cases regarding nature protection, whether citizens expect the EU to become more involved in promoting nature protection, or whether nature protection should be left to each individual Member State; whether citizens expect the EU to introduce laws on nature protection to be applied in all Member States equally or whether the EU should limit itself to coordinating Member States' initiatives; whether the EU should focus on laying down rules, or whether the EU should more actively promote their monitoring and enforcement in Member States.

Answer:

Several studies have shown that public support for nature conservation is strong and fairly stable. For example, in a survey that asked what determined the quality of everyday life, contact with friends and family received the highest ratings by respondents, followed by nature and outdoor recreational facilities. The availability of health and welfare facilities, shops, schools, cultural amenities, etc. scored lower. This strong public support is also reflected by the number of volunteers working for nature conservation. These include citizens helping conservation organisations with maintenance, and tasks, such as observing and counting species. Compared to other countries, a high proportion of Dutch citizens are members of one or more nature NGOs. Protected nature areas, as well as national parks, are generally very accessible and are popular destinations for outdoor recreation.

These studies also show that the vast majority of the population feels that the government should play an active and leading role in protecting and strengthening nature conservation. However, the support for nature *policy* is less firm than support for nature conservation: caring for and investing in nature is seen as a responsibility that is also shared by citizens, the business community, farmers, and (other) non-governmental groups. Furthermore, support for government nature policies has declined since the early 2000s. Sometimes, attitudes have gone to the point of an outright rejection of the legitimacy or appropriateness of policy instruments (translating into legal claims). This evaporation of support tends to occur especially when investment plans for new buildings and reconstruction (real estate), business expansion (especially in agriculture), or infrastructures (roads, energy) are obstructed by nature legislation. Although there are only a few cases in which such plans had to be withdrawn as a result of nature legislation, the perception of "nature policy as a hindrance" has become almost insurmountable.

In assessing or valuing nature policy, people in general do not seem to make a sharp distinction based on the origin of the policy framework, be it the EU, a member state or a multilateral agreement. Naturally, this is entirely different in the case of legal suits, where the implementation of EU-based policy measures is often a source of conflict. In commenting on this matter, the Dutch Council on the Environment and Infrastructure (RLI) issued the following statement (RLI, 2013): "the designation of the Natura 2000 areas has met with opposition, as has the manner in which the measures further to the Birds and Habitats Directives are implemented and enforced. That opposition is chiefly concerned with changes in space usage. The legislative frameworks give rise to a significant research obligation and severely limit opportunities for discretion in (spatial) planning."

Background information (see Appendix 2 for summaries of each reference)

1. *Environmental Data Compendium*, on-line documentation, in Dutch only
2. Balans van de leefomgeving 2012 (*Assessment of the Living Environment*, available in Dutch only)
3. Balans van de leefomgeving 2014 (*Assessment of the Living Environment*, available in Dutch only)
4. T.A. de Boer, A.T. de Blaeij, B.H.M. Elands, H.C.M. de Bakker, C.S.A. van Koppen & A.E. Buijs (2014). *Public support base for nature and nature policy in 2013*. Wageningen, Statutory Research Tasks Unit for Nature and the Environment, Wageningen UR. WOt-rapport 126
5. *Kennis en houding van Nederlandse burgers ten aanzien van de nieuwe natuurvisie. (Knowledge of and attitude of Dutch citizens towards the new nature policy vision)* Bureau Veldkamp, Rogier van Kalmthout en Tim de Beer; september 2013 Ref.nr: V6066 / 2013 (in Dutch only)
6. Council for the Environment and Infrastructure (Rli), *Nature's Imperative -Towards a robust nature policy.* May 2013 http://www.rli.nl/sites/default/files/natures_imparative__uk_def_0.pdf
7. Arjen Buijs, Fransje Langers, Thomas Mattijssen en Irini Salverda, 2012. *Draagvlak in de energieke samenleving: van acceptatie naar betrokkenheid en legitimatie. (Support for nature in a dynamic society – from acceptance to involvement)* Wageningen, Alterra, Alterra-rapport 2362 (In Dutch only)
8. Performing failure in conservation policy: *The implementation of European Union directives in the Netherlands*. Raoul Beunen, Kristof Van Asscheb, Martijn Duineveldc, Land Use Policy Volume 31, March 2013, Pages 280–288

Coherence

Evaluating the coherence of legislation, policies and strategies means assessing if they are logical and consistent, internally (i.e. within a single Directive), with each other (i.e. between both Directives), and with other policies and legislation. Here we are looking for evidence regarding how far and in what ways the Directives are complementary and whether there are significant contradictions or conflicts that stand in the way of their effective implementation or which prevent the achievement of their objectives.

C.1 – To what extent are the objectives set up by the Directives coherent with each other?

This question focuses on coherence between objectives within each Directive, and/or between objectives of the Birds and Habitats Directives. It covers not only the strategic objectives but also the specific and operational objectives set out in Annex I to this document. Based on experience in your country/region/sector, please provide evidence of any inconsistencies between the objectives that negatively impact on the implementation of the Directives.

Answer:

Both Directives have their own approach towards conservation biodiversity: while the Birds Directive (by the wording of the objective) aims at conserving populations of species, the Habitats Directive aims at biodiversity in a broader sense.

Strictly protection of species.
Under the Birds Directive, all wild birds are protected, while the Habitat Directive only applies to a number of specified species and habitat types named in the Annexes. This means, among other things, that species protection concerns all bird species, including those that are not threatened in any way. In this respect, the Birds Directive goes too far, and presents difficulties, such as that of solving the problems caused by gulls and pigeons in cities.

Article 9 BD – article 16 HD
The requirements of article 9 (1) of the Bird Directive (reasons for derogation) are not consistent with the requirements of article 16 (1) of the Habitats Directive. The Birds Directive is stricter, which is not necessary in the light of the objectives.

Article 4(4) HD
According to article 4 (4) of the Habitats Directive *"[the Member State concerned shall designate that site as a special area of conservation …,] establishing priorities in the light of the importance of the sites for the maintenance or restoration, at a favourable conservation status, of a natural habitat type in Annex I or a species in Annex II and for the coherence of Natura 2000, and in the light of the threats of degradation or destruction to which those sites are exposed."*
This could be considered a shortcoming in the coherence pursued for Natura 2000, as this section may not be applicable to bird interests where SPAs and SACs overlap. If a site's objectives for birds conflict with its objectives for other species and habitat types, problems in management will appear. This occurs, for example, when (endangered) HD species are bulk food for birds that should be conserved (European weatherfish and purple heron, or tundra vole and hen harrier), or if the objectives compete for space (for example, geese and valuable grasslands in the river basins).

C.2 – To what extent are the Directives satisfactorily integrated and coherent with other EU environmental law e.g. EIA, SEA?

This question is similar to the previous question, but focuses on the extent to which the EU Nature Directives are coherent with and integrated into other EU environment legislation, and the extent to which they are mutually supportive. EU environment legislation of particular relevance to nature conservation includes the following:

- *Strategic environmental assessment of policy plans and programmes 2001/42/EC Directive (SEA)*
- *Environmental impact assessment of projects 85/337/EC Directive as codified by Directive 2011/92/EU (EIA)*
- *Water Framework Directive 2000/60/EC, (WFD)*
- *Marine Strategy Framework Directive 2008/56/EC (MSFD)*
- *Floods Directive 2007/60/EC (FD)*
- *National Emission Ceilings Directive 2001/81/EC (NECD)*
- *Environmental Liability Directive 2004/35/EC (ELD).*

This question considers how the main provisions and measures set out in these instruments interact with the EU nature legislation, including whether there are potential gaps or inconsistencies between these instruments and the EU nature legislation, for example whether the current permitting procedures are working in a coherent way or whether they are acting as barriers to achieve the EU Nature Directive's objectives; whether the assessments required under the different pieces of EU legislation, in particular under the EIA, are aligned or whether there are differences which result in additional administrative burden; whether any identified gaps and inconsistencies are due to the texts of the Directives or due to implementation in your/a Member State.

Answer:

Regarding the EIA:
On April 25, 2014, an amendment of the EIA Directive was published. In the European Court's case law, this Directive is often used to explain terms (e.g. for the definition of the term "project"). The amended EIA Directive states explicitly that the evaluation of an effect may take account of mitigating measures. In the BHD, this is not the case: only compensating measures are mentioned. It would be worthwhile to clarify how the provisions from the EIA Directive should be applied within the framework of the BHD.

Regarding the SEA:
The appropriate assessment of plans carried out according to the strict requirements in article 6 (3) of the Habitats Directive may be unnecessary. This is because each individual project that may result from the plan will in the future need to be assessed appropriately in accordance with the requirements of article 6 (3) before being implemented. In light of this, a guarantee is already in place to prevent any adverse effects in the Natura 2000 sites. The strategic environmental assessment for policy plans and programs (2001/42/EC Directive) might be sufficient for plan assessment purposes in stead of a detailed appropriate assessment (see also S.3).

Regarding the WFD:
Although the Nature Directives and the WFD are all focused on improving the environment and show no essential contradictions in their objectives, we have encountered some inconsistencies when it comes to practical implementation. This is especially the case where human intervention has modified a body of water and valuable protected habitat types and/or BHD-protected species have developed in the modified environment as a result. In these cases achieving the WFD objective to restore the good (natural) status, sometimes Natura 2000 objectives are in the way. Examples of this are:

- In Lake IJssel (the former Southern Sea, in the centre of NL) the WFD is striving to lower nutrient concentrations and to improve the current eutrophic situation. While this will lead to a higher variety in fish species (= higher biodiversity), it will also lower fish weight. At the same time, the Natura 2000 objective is to keep the food situation at the same level for fish-fed birds. For more information on this case see case

"ANT IJsselmeer"[68];

- Another example is in the Lake Grevelingen, in the SW part of the NL (delta area). The former sea arm Grevelingen was dammed, which resulted in the current absence of tide. In the context of the WFD there are plans to partially restore the original fresh and salt water transitions. Because salt water enters the Grevelingen and natural dynamics again are enabled, the water quality in this fresh water lake will improve and the area can be more easily maintained in better condition. However, the salt influence could put the population of the fen orchid (Liparis loesii) (objective for HD/Natura 2000) at risk. As a result the final implementation of the plan is uncertain.
- The "Fish Migration River" project in the Afsluitdijk (enclosure dam between Lake IJssel and the Wadden Sea) encountered a similar issue. Initially, it seemed impossible to find space to build this fish migration facility (WFD objective) within SAC Wadden Sea. Luckily, a "work-around solution" has been developed (see case "Vismigratierivier"[55]). Nevertheless, this solution has not yet been tested in court, and we should note here that we have seen other solutions in the past that seemed promising, but failed in court.

The mandatory reporting under the WFD on Natura 2000 (Annex VII, A4.3) has proven to be another issue. This poses difficulties due to differences in the spatial units and parameters**.**

Regarding the Floods Directive:
The measures required to achieve the objectives of the Floods Directive include construction works that temporarily increase nitrogen depositions on BHD-protected habitats that are sensitive to nitrogen – a situation that also arises in implementing measures for the WFD. To date, these construction works have only been permitted on the condition that they would not lead to an increase of the N-deposition. This was done, for instance, by compensating for the increase by means of decreasing the deposition of other sources. In addition to that, the Integrated Approach to Nitrogen (PAS) will require the prevention of any significant negative impact in the future. Even a temporary increase of the N-deposition is not allowed. This kind of stringency poses a risk: activities that are conducive to the objectives of the Flood Directive, to the overall objectives of nature conservation and sometimes also to those of the BHD could become too complicated to implement and end up getting delayed, or cancelled altogether. And, as some stakeholders have noted, this level of complexity is unnecessary. In Broekmeyer et al. 2015 this is illustrated in the case "Stroomlijn".

Regarding MSFD:
The MSFD is complementary to the Habitat and/ or Bird Directive. The MSFD protects the marine ecosystem and biodiversity as a whole, where both other Nature Directives focus on specific component of the ecosystem. Both directives are meant to be mutually strengthening in reaching the nature's goal of strengthening the marine ecosystem. This has its advantages (compatibility, synergies) but also might cause administrative burdens for the government and stakeholders.
Broekmeyer et al. 2015 describe the case "Friese Front", in the strengthening of the ecosystem various EU-policies and directives interact (BHD, Floods directive, MFSD).

Regarding NECD:
There are no inconsistencies between the NECD and the BHD.
In general, the NEC Directive and the Nitrates Directive can be seen as a support for nature policy in the Netherlands.
The policy and legislation implemented in the Netherlands to meet the national emission ceilings of nitrogen and ammonia contributes to decreasing the deposition of nitrogen and ammonia on sites protected under the BHD. However, this does not always provide sufficient protection, especially in the case of sites with habitats that are very sensitive to high levels of N-deposition. For these areas, the Integrated Approach on Nitrogen (PAS) has been prepared to provide additional protection[69].

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[68] Broekmeyer et al., 2015. Rapportage analyse cases-onderzoek implementatie Vogel- en Habitatrichtlijn. Alterra-rapport. *In preparation*
69 http://www.rijksoverheid.nl/documenten-en-publicaties/kamerstukken/2014/12/19/programmatische-aanpak-stikstof.html

C.3 - Is the scope for policy integration with other policy objectives (e.g. water, floods, marine, and climate change) fully exploited?

This question is linked to the previous questions as it addresses the extent to which the objectives of the Nature Directives have been integrated into or supported by the objectives of other relevant EU environment policies. However, this question focuses more on policy implementation. The other EU legislation and policies targeted in this question are the same as those referred to under question C.2, as well as climate change policy. When answering this question, please note that the scope of integration refers to the integration from the EU Nature Directives to other policies as well as to the extent in which the objectives of these other policies are supported by the implementation of the Nature Directives.

Answer:

Regarding the WFD, the Floods Directive, the MFSD and the NECD, see question C.2.

Climate
Climate policies take account of the EU nature directives if they involve direct effects on nature. (Climate policies on the CO_2 market and sustainable (use of) energy are examples of policies where this usually does not apply).

Water management in the Dutch delta
In the Netherlands, the 2015 Delta programme aims at making the country's delta region resistant to climate change, mainly to the rise in sea level and peaks in fresh water transit through the rivers. Because of the regulations in the Directives, existing nature in areas such as the river basins must be protected. The Delta programme aims, within the framework of improving flood protection and reducing water shortages, at conservation and, if possible, at the restoration and development of nature, which is partly protected under the Nature Directives.

References
Delta Programme 2015. Working on the delta. The decisions to keep the Netherlands safe and livable. See http://deltacommissaris.nl/english/delta-programme/delta-programme-2015/index.aspx

Greenhouse gases
The EU policy on climate change focuses on reducing emissions of greenhouse gasses and improving energy efficiency. On the level of overall objectives, there are no major inconsistencies between this policy and the BHD. On the implementation level, problems are sometimes encountered, e.g.: potential fatalities among birds and bats in the case of windmill park developments in certain areas.
Another aspect of this issue is that some areas, which are protected under the BHD, there are initiatives to develop the harvesting of biomass in the natura 2000 site as part of local energy strategy. This is the case, for instance, at the Natura 2000 site of Olde Maten, which is analysed by Broekmeyer et al (in preparation).[70]

[70] Broekmeyer et al., 2015. Rapportage analyse cases-onderzoek implementatie Vogel- en Habitatrichtlijn. Alterra-rapport. *In preparation.*

C.4 – To what extent do the Nature Directives complement or interact with other EU sectoral policies affecting land and water use at EU and Member State level (e.g. agriculture, regional and cohesion, energy, transport, research, etc.)?

In this question we are aiming at gathering evidence on whether the provisions of EU nature legislation are sufficiently taken into account and integrated in EU sectoral policies, particularly in agriculture, rural development and forestry, fisheries and aquaculture, cohesion or regional development, energy, raw materials, transport or research policies. It also addresses whether those policies support and act consistently alongside EU nature legislation objectives Please provide specific examples which show how the Nature Directives are coherent with, or conflict with, relevant sectoral legislation or policies. Please be as precise as possible in your answers, e.g. pointing to specific articles of the legislation and how they support or contradict requirements or objectives of other legislation or policies, stating what are main reasons or factors for the lack of consistency and whether there are national mechanisms in place to monitor coherence.

Answer:

We answer this question together with question C.5 in a short way.

General

At the level of overall objectives and policy measures, no major inconsistencies have been identified. However, we do want to raise three issues.

The greening of the CAP pillar 1 and the implementation of the BHD.

The commentary under question S.1, points out that certain BHD objectives outside the National Nature Network have not been achieved effectively. Many of the objectives in question are the BHD objectives concerning species that occur on agricultural land, (e.g. meadow-birds). Agri-environmental measures are directed at these values (see below). The "greening" of pillar 1 could strengthen these measures and so enhance the biodiversity of BHD-species, such as meadow birds, on farmlands.

The greening measures are, however, merely limited to measures on arable land and not on grassland. Thus, there is only limited synergy between the CAP pillar 1 and the Nature Directives. Broekmeyer et al[71] discuss this subject in the case "Weidevogels".

Rural Development (CAP (pilar 2))

Agri-environmental measures.

In 2011, it was concluded in a report by the RLI[72] that the national programme for nature management on farmland (agri-environmental measures) had not been sufficiently effective. Following that report, a decision was made to reform that programme and to focus it from here on out on the development and protection of habitats of BHD species that occur on agricultural lands. This programme is now being launched in 2015. In the new programme for nature management, farm land will be integrated in the Dutch 2015-2021 RDP. In this respect, the EU policy for Rural Development has contributed to and been integrated in BHD implementation in the Netherlands.

Supporting the adaptation of agriculture in and around BHD-sites

Often in the Netherlands, the protection and management of BHD species and habitat types has a large impact on the agriculture in the areas surrounding the protected species and habitats. Most farmers around the Natura 2000 sites are willing to participate in nature conservation efforts. However, they also have to deal with more rules and legislation and need to take extra nature conservation measures, even if they do not want to.

Rural Development and Regional Development

With these two programmers, the EU supports sustainable regional development. As many Natura 2000 sites are either used for multi-functional purposes or are located in a multi-functional environment, an integrated approach is the appropriate way to protect and – where necessary to improve – the quality of the concerned BHD values and the other functions. Stakeholders in the Netherlands have seen great potential for achieving BHD goals in combination with other public objectives, such as water management, recreation, housing, or integrated area development. In principle, such an approach is cost effective, as investment and management costs for

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[71] Broekmeyer et al., 2015. Rapportage analyse cases-onderzoek implementatie Vogel- en Habitatrichtlijn. Alterra-rapport. *In preparation*

[72] RLI Raad voor de Leefomgeving en Infrastructuur, 2013. Onbeperkt houdbaar Naar een robuust natuurbeleid

nature can be shared to some extent with other cost carriers.
However, in practice, the application of such an integrated approach has proven difficult to reconcile with the BHD. A part of the problem is due to the definition and application of the terms "plan" and "project" and the application of the articles 6.1-6.4 in the cases of integrated approaches.
Such integrated approaches– either spatial or thematic (f.e. a watermanagment plan of an area development plan (“gebiedsontwikkeling)) - typically consist of a set of interconnected activities. The combined effects of these activities have a nett positive effect on both the BHD values and on the other societal objectives concerned.
However, in the assessment procedures, the integrated programmes/projects are generally split up. The “non-nature components” are considered as plan/project to which articles 6.3 and/or 6.4 have to be applied, and the "nature component" is eventually considered as mitigation or compensation. This "splitting up" hinders the implementation of the integrated programmes / the projects, especially when the BHD-values of a site are not in a favourable condition. Often it appears to be difficult to prove the imperative reason of overriding public interest of the activity, especially when is concerns activities of private parties. Then first measures have to be taken assure that the good conditionof the BHD-values can be reached, before the other components of the programme can be implemented. This is not always attractive for both public and private parties. In such cases, the BHD limits the possibilities for the realisation of “win-win”-situations that have also nett positive effects on BHD-values.
Broekmeyer et al. 2015 analysed a number of such integrated "nature inclusive" projects in relation to the application of the articles 6.1, 6.3 and 6.4 and the definition of the concepts “plan” and “project” (the case “Hondsbossche Zeewering” (water safety (coast) and BHD-values), the project “Markerwadden” (a.o. recreation, housing construction, BHD-values), the project “Verbreding A2” (infrastructure, BHD values) and case “Stroomlijn” (water safety (rivers), BHD-values)).

C.5 - How do these policies affect positively or negatively the implementation of the EU nature legislation

In this question, we are keen to gather evidence on whether agriculture and rural development, fisheries and aquaculture, cohesion or regional development, energy, raw materials, transport and research policies have a positive or negative impact on the achievement of the objectives of nature legislation. Please provide specific examples/cases (including infringement cases or case law), which demonstrate clear conflicts or incoherencies between sectoral policies and EU nature legislation, and/or examples showing how specific policies influence the implementation of the Nature Directives in a positive or negative way, for example in relation to Article 6 of the Habitats Directive (see Annex I to this questionnaire). Where possible, please include evidence of the main factors influencing the positive and negative effects. Please consider in your answer what ex ante and ex post evaluation procedures are applied to ensure that this coherence is implemented or supervised.

Answer:

See C.4.

C.6- To what extent do they support the EU internal market and the creation of a level playing field for economic operators?

This question seeks to gather evidence of the implications of the EU Nature Directives for economic operators in terms of whether they help ensure a level playing field across the EU (e.g. by introducing common standards and requirements for activities carried out in or around Natura 2000 areas or otherwise depend on natural resources protected under the Directives), predictability and legal certainty (e.g. helping to avoid that developments are blocked due to 'Not In My Backyard' type challenges), or whether they negatively affect the internal market.

Answer:

Issue: differences in protection status of nature on both sides of a border

Stakeholders in border areas have reported that there are some issues and problem areas related to the different ways in which the BHD is implemented in national policies. For example, the conditions for the development of agricultural, or other economic activities in and around Natura 2000 sites may differ.

This aspect plays a role, for instance, in the opposition of some stakeholders to the development of the Natura 2000 site at Engbertsdijksvenen in the eastern part of the Netherlands. One of the objectives in this area is the development of an "active raised bog." The measures planned will have a large impact on the agricultural lands around this site and on the ability of local farm enterprises to develop. At the same time, in nearby Germany, comparable habitats are less protected. See Broekmeyer et al.[73] for more elaboration of the case "Engbertsdijksvenen".

Issue: definition and assessment of significant effects differ between countries

The BHD requires that negative effects and impacts of plans and projects on the BHD-values in the site must be avoided. However, in many cases ecologists do not have sufficient ecological knowledge to assess if a plan or project has significant negative effects. In other cases it was found that different countries assess effects differently and apply different standards. This might have influence on the level playing field.

For example, on a European level critical deposition values for each habitat type have been set. It should, therefore, be possible for experts to also reach a common understanding on a European level to when a contribution to eutrophication has a significant effect on a habitat type. The current difference between Member States regarding the threshold for significance (for instance 0.05 mol/ha/yr in the Netherlands[74], and 21,4 mol/ha/yr in Germany[75], both based on scientific knowledge) results in additional administrative burden and legal uncertainty for project developers.

[73] Broekmeyer et al., 2015. Rapportage analyse cases-onderzoek implementatie Vogel- en Habitatrichtlijn. Alterra-rapport. *In preparation*

[74] http://www.rijksoverheid.nl/documenten-en-publicaties/besluiten/2014/10/09/ontwerpbesluit-grenswaarden-programmatische-aanpak-stikstof.html

[75] see Bundesverwaltungsgericht 9A25-12 from the 3rd of April 2014.

C.7 – To what extent has the legal obligation of EU co-financing for Natura 2000 under Article 8 of the Habitats Directive been successfully integrated into the use of the main sectoral funds?

This question builds on question Y.2 on the availability and access to funding, but aims at examining whether Member States have sufficiently identified the funding needs and are availing of EU funding opportunities to meet the requirements of Article 8 of the Habitats Directive. EU co-funding for the Natura 2000 network has been made available by integrating biodiversity goals into various existing EU funds or instruments such as the European Agricultural Fund for Rural Development (EAFRD), European (Maritime and) Fisheries Fund (EFF / EMFF), Structural and Cohesion funds, LIFE and Horizon 2020. In your reply, please distinguish between different sources of funding.

Answer:

EU funding 2007-2013

To ensure favourable conservation status for the species and habitats occurring within the Natura 2000 sites, the Netherlands has the option to cover part of the costs by drawing on various European Funds, in combination with Dutch government and Provincial funding. Leneman et al (2009, see http://edepot.wur.nl/14589) estimated that from 2007 to 2013, some € 1.0 billion will be available from these funding sources. About € 100 million from EU funds, approximately € 400 million from Dutch government funds and some € 500 million from Provincial funding (see table C7.1).

Table C7.1 Estimated European, State and Provincial funds for Natura 2000 in the Netherlands (2007-2013)

Funding type	**Funding available**
	€ million
European Funds	*102*
- European Agricultural Fund for Rural Development (EAFRD)	36
- LIFE+	34
- ERDF Funding for European Territorial Cooperation	22
- ERDF Regional Competitiveness and Employment	10
State Funds	*390*
- Ministry of Agriculture, Nature and Food Quality	266
- Ministry of Housing, Spatial Planning and the Environment	104
- Ministry of Transport, Public Works and Water Management	20
Provincial Funds	*541*
- ILG	526
- Other	15
Total	**1,033**

Source: Leneman et al. (2009), see http://edepot.wur.nl/14589

Regarding the EU funding, Leneman et al. (2009; http://edepot.wur.nl/14589) identified three types of EU financial instruments used for the financial investments required: the European Agricultural Fund for Rural Development (EAFRD), LIFE+ and the European Regional Development Fund (ERDF). Some € 100 million is estimated to have been available from European funds and Dutch co-financing from 2007 to 2013. These three instruments will be addressed below in more detail. The European Fishery Fund and the European Maritime and Fisheries Fund will also be discussed here.

EAFRD

Only a few EAFRD measures are potentially relevant to the realisation of Natura 2000 objectives. Furthermore, not all of the funding for these measures can be allocated to Natura 2000 alone, since the measures also contribute to other objectives. Table C7.2 summarises the assumed financial contribution of the EAFRD towards maintaining or restoring the Natura 2000 network to a favourable status for four measures (see Leneman et al, 2009; http://edepot.wur.nl/14589). This table presents a breakdown of the results into European Union funds, Dutch co-financing, funding from top-ups (additional provincial funding) and private sector contributions.

Table C7.2 Available funding and funding allocated to Natura 2000 for the four EAFRD measures, believed to contribute to Natura 2000

Measure	Total	EU	Co-funding	Provincial top-	Private sector

	EAFRD	Funding	Netherlands	up funding	contribution
	€ million	€ million	€ million	€ million	€ million
Measure 125	255	80	80	55	40
- Natura 2000	23.0	7.2	7.2	5.0	3.6
Measure 214	412	108,6	108,6	195	Not applicable
- Natura 2000	3.7	1.0	1.0	1.7	
Measure 216	199	9	9	181	0
- Natura 2000	129.4	5.9	5.9	117.6	
Measure 323	116	28	28	2	58
- Natura 2000	16.6	4.0	4.0	0.3	8.3
Total Natura 2000	**172.7**	**18.1**	**18.1**	**124.6**	**11.9**

Source: Dutch Rural Development Programme, October 2008; for Natura 2000 own, as listed in Leneman et al. (2009), see http://edepot.wur.nl/14589

Within the context of European funds, it is logical to view EU Funding and co-financing by the Netherlands together complementary parts of a whole, whereas provincial top-up funding can be seen as supplementary to the RDP measures. Thus, European funds for Natura 2000 from the EAFRD totalled some € 36 million from 2007 to 2013 (Leneman et al (2009); see http://edepot.wur.nl/14589).

LIFE+

In the European Union as a whole, LIFE+ had a budget of € 2.1 billion for the 2007 to 2013 period. LIFE+ consists of three pillars, one of which is “Nature and Biodiversity”. At least 50% of the budget must be spent on this pillar, which consists of two parts in itself: LIFE+ Nature and LIFE+ biodiversity. The first part serves only to support Natura 2000 projects; the latter also supports other projects on biodiversity.

September 2007 witnessed the first call for the LIFE+ project, and the second call was launched during the fall of 2008. Projects in the Netherlands were granted some € 6 million as a result of the first call (of a total € 187 million throughout the EU); the second call resulted in a budget of about € 6.6 million for the Netherlands (of an EU-wide total of € 207 million; www.senternovem.nl/life/).

Thus, the Netherlands accounted for a share of 3.1% of the total budget. Leneman et al (2007) have assumed that 3.1% of the LIFE+ budgets would be spent in the Netherlands from 2007 to 2013. They also took into account the maximum for programme costs (22%; see REGULATION (EC) No 614/2007), and these costs are deducted from the total available LIFE+ budget.

Combining this with the minimum 50% to be spent on the “Nature and Biodiversity” pillar, a total sum of € 25.4 million was estimated to be potentially available from European sources. By spending these funds entirely on Natura 2000, the Netherlands would only need to add an extra 25%, as co-financing of 25% is mandatory for projects in LIFE+ Nature. Thus, the funds available came to some € 34 million for 2007 to 2013, co-financing included.

ERDF

Leneman et al. (2009) provide an overview of the ERDF funding in the four Dutch regions to stimulate Regional Competitiveness, as well as the funds potentially available for Natura 2000.

Table 3.2. Overview of ERDF funding (regional competitiveness) and additional Dutch funds potentially available for Natura 2000 (€m)

Dutch region	Budget for Regional Competi-tiveness	Budget not allocated to Lisbon goals	Budget al-located to 'promotion of biodi-versity and nature protection'	Budget po-tentially available for Natura 2000 (ERDF part)	Additional funding by Dutch gov-ernment (%)	Budget po-tentially available for Natura 2000 in the Neth-erlands
West	310.6	115	2.0	3.2	60	8.0

North	169.4	64	1.7	2.7	60	6.8
East	164	63	2.0	3.3	55	7.3
South	186	63	0.0	0.0	61	0.0
Total	*830*	*305*	*5.7*	*9.2*		*22.1*

Leneman et al (2009) provide an overview of the ERDF funding to foster territorial co-operation, as well as the funds potentially available for Natura 2000. It is assumed that the budget potentially available for Natura 2000 in the Netherlands (ETC portion) can be deduced from the share of the budget allocated for the “promotion of biodiversity and nature protection” in the overall budget of the programmes, and the total ERDF budget for the Netherlands.

Table 3.3. Overview of ERDF funding for European Territorial Cooperation (ETC), and additional Dutch funds, potentially available for Natura 2000 (€m).

Program	Budget for European Territorial Coopera-tion	Budget al-located to “Promotion of biodiversity and nature” protection'	ERDF budget for the Nether-lands	Budget po-tentially available for Natura 2000 in the Netherlands (only ETC)	Addi-tional funding by Dutch govern-ment (%)	Potentially available for Natura 2000 in the Netherlands
Netherlands-Germany	138.6	0.9	86.0	0.6	50	1.1
Maas-Rijn	72.0	0.7	22.6	0.2	50	0.4
Netherlands - Flanders	94	1.9	49.3	1.0	50	2.0
Maritime	167	1.7	11.3	0.1	45	0.2
Northwest-Europe	173	10.9	46.7	2.9	50	5.9
Total	*644.6*	*16.1*	*215.9*	*4.8*		*9.6*

<u>European Fishery Fund & European Maritime and Fisheries Fund</u>
Both the European Fishery Fund (2007-2013) and the European Maritime and Fisheries Fund (2014-2020) will, to a certain extent, provide funding that contributes to the favourable status of marine habitats and species.

It is not clear what measures and costs that are covered by the European Fishery Fund (total budget € 115.8 million) can be attributed to Natura 2000 objectives (source: Prioritized Action Framework Natura 2000 voor de periode 2014-2020; Nederland).

In the 2014-2020 period, the EMFF budget of € 102 million will be allocated as follows:
a) 21.5% to improve return on investments in the fisheries and aquaculture value chains;
b) 72.5% for the protection of the environment and more efficient use of resources; about 25% to stimulate sustainable innovations and investments; about 25% for data collection; about 21% for inspection and enforcement; and about 2% for Integrated Maritime Policy;
c) 6% for technical assistance.

Probably a considerable portion of b) will contribute to a favourable status for marine habitats and species, since those allocations are focused on protecting the environment and using resources more efficiently.

Source: Rijksoverheid (2014), Partnerschapsovereenkomst Nederland 2014-2020, 29 juli 2014, see http://www.go-oostnederland.eu/data//20140729PartnerschapsovereenkomstNederland2014-2020.pdf (in Dutch)

EU funding 2014-2020

As discussed under question Y.1 and Y.2, a nominal amount of € 40 million per year, or € 280 million in total during the 2014 to 2020 period will be covered by EU funding. This will be roughly equivalent to 10% of EU funding, since total government funding during that period will be about € 2.905 billion (see table Y1.3 under question Y.1). Of this € 40 million, about € 35 million will be allocated to agri-environmental schemes and goose management, and some € 5 million to hydrology measures as part of the Integrated Approach on Nitrogen (PAS) (Rijksoverheid (2013) Natuurpact ontwikkeling en beheer van natuur in Nederland, Den Haag). These figures exclude funding from the European Maritime and Fisheries Fund, which was discussed above.

C.8 - Are there overlaps, gaps and/or inconsistencies that significantly hamper the achievements of the objectives?

This question refers to overlaps, gaps and/or inconsistencies in the different EU law/policy instruments regarding nature protection. It therefore depends largely on the results of other questions related to the coherence of the Nature Directives with other EU law and policies. When answering this question you may want to consider whether the identified overlaps, gaps and inconsistencies hamper the achievement of the Directive's objectives (e.g. see Annex I to this questionnaire).

Answer:

See answers to questions C.1 to C.7.

C.9 - How do the directives complement the other actions and targets of the biodiversity strategy to reach the EU biodiversity objectives?

With this question we seek to collect evidence on ways in which the implementation of measures under the Birds and Habitats Directives that are not explicitly mentioned in the EU Biodiversity Strategy, help to achieve actions and targets of the EU Biodiversity Strategy. For example, restoration of Natura 2000 sites can significantly contribute to helping achieve the goal under Target 2 of the EU Biodiversity Strategy to restore at least 15% of degraded ecosystems.

Answer:

Target 2: The work done for the Prioritised Action Framework (PAF) under Natura 2000 is considered a pragmatic base for the establishment of a Restoration Priority Framework (RPF) to meet the overall goal of restoring 15 % of the degraded ecosystems, even though no specific studies have been undertaken in this field. As Natura 2000 sites are usually areas that already have relatively high biodiversity, it seems logical that areas outside that network could profit more from biodiversity improvements. In other words, too much focus on Natura 2000 for this specific general ecosystem restoration goal could hinder overall gains in biodiversity.

Target 3: The lists of species and habitats mentioned in the Birds and Habitats Directive have been useful in working towards the Target 3 goal of integrating biodiversity with agriculture in a new approach for agro-environmental measures in the Rural Developments Programmes under CAP. Several studies[76] have been conducted to identify the BHD species that are most dependent on agricultural areas and to offer insight into appropriate measures.

Forestry is an integral part of the Netherlands' nature and biodiversity policy. For years, the Netherlands has promoted a close–to-nature approach to forestry. As part of that, the natural regeneration of forests is promoted instead of planting new trees. Measures are also taken to help increase the percentage of dead wood in forests. About 30% of Dutch forests overlap with the Natura 2000 sites.

The national implementation of the Directives has prompted the development of codes of conduct for forest managers. The codes cover the issue of harvesting trees during the breeding season.

Target 4: The CFP's reform entered into force in 2014. An important achievement is the obligation under article 2 parag. 3 of Reg. 1380/2013, which states that: "the CFP shall implement the ecosystem-based approach to fisheries management so as to ensure that negative impacts of fishing activities on the marine ecosystem are minimised, and shall endeavour to ensure that aquaculture and fisheries activities avoid the degradation of the marine environment." The Dutch government has established three marine NATURA 2000 sites and is still in the process of establishing other sites: 3 under BHD, and 2 under MSFD. Measures to implement the conservation objectives for habitats and (bird) species have been or will be applied through the reformed CFP. Thus, these measures will apply to all fishing vessels and will contribute to the EU biodiversity objectives.

[76] Agrarisch Natuurbeheer, potenties buiten de EHS, Alterra-rapport 2504| ISSN 1566-7197; Agrarische bedrijfsvoering en biodiversiteit : kansrijke gebieden, samenhang met bedrijfstypen, perspectieven Alterra, 2013 (Alterra-rapport 2436); Het belang van Nederland buiten de Ecologische Hoofdstructuur voor soorten van de Vogelrichtlijn en van bijlage V van de Habitatrichtlijn, Sovon-rapport 2013/15

C.10: How coherent are the directives with international and global commitments on nature and biodiversity?

This question seeks to assess whether and how the EU nature legislation ensures the implementation of obligations arising from international commitments on nature and biodiversity which the EU and/or Member States have subscribed to[77], and whether there are gaps or inconsistencies between the objectives and requirements of the EU nature legislation and those of relevant international commitments, including the way they are applied. For example, the Directives' coherence with international agreements which establish targets relating to nature protection and/or require the establishment of networks of protected areas.

Answer:

We experience no major gaps or inconsistencies between the objectives and requirements of the EU nature legislation and those of relevant international commitments. An example of coherence between international commitments and the BHD in the Netherlands is the assignment of protected wetlands sites. The Ramsar convention (1971) came into force in 1975 and the Kingdom of the Netherlands assigned 48 sites with a total area of 844.000 ha (6 of them in the Dutch Caribbean Islands). The implementation and protection of these areas in the Netherlands has been formalised by the Birds and Habitat Directives. The Ramsar sites became Natura 2000 sites.[78] Recently the boundaries of both types of protected sites have been harmonised in order to unify the reporting obligations and comparability of these sites.

However, there are some small differences and issues:
A study (Alterra, 2000)[79], comparing the BHD lists with pan European agreements (Bern convention) and the IUCN red list, made clear that the BHD seems to put more focus on vertebrates, especially birds, then expected considering the threatened status of species in general. Aquatic - , soil - and cave species are under-represented. The apparent focus of the BHD on visual species could possible hinder the goal to stop the loss of biodiversity in general.
For CITES the European Commission has organised the harmonisation of the lists of CITES and BHD. All BHD-species have been put on the A-list of the EU-CITES Wildlife Trade Regulation, which protects species against overexploitation (e.g. raptor birds). Furthermore there is no coherence (but also no contradiction) between BHD and CITES.

[77] e.g. Bern Convention; Convention on Biological Diversity; Convention for the Protection of the World Cultural and Natural Heritage; Ramsar Convention; European landscape Convention; CITES Convention; CMS (Bonn) Convention; International Convention for the protection of Birds; Agreement on the Conservation of African-Eurasian Migratory Waterbirds; Regional Sea Conventions (Baltic, North East Atlantic, Mediterranean and Black Sea).
[78] http://www.ramsar.org/sites/default/files/documents/2014/national-reports/COP12/cop12_nr_netherlands.pdf
[79] Vergelijking van de soortenbijlagen van de EG-Habitatrichtlijn, de EG-Vogelrichtlijn en de Conventie van Bern met de internationale rode lijsten, Alterra, 2000 (Alterra-rapport 182)

EU Added Value

Evaluating the EU added value means assessing the benefits/changes resulting from implementation of the EU nature legislation, which are additional to those that would have resulted from action taken at regional and/or national level. We therefore wish to establish if EU action (that would have been unlikely to take place otherwise) made a difference and if so in what way? Evidence could be presented both in terms of total changes since the Directives became applicable in a particular Member State, in changes per year, or in terms of trends.

AV.1 - What has been the EU added value of the EU nature legislation?

When responding to this question, you may wish to consider the following issues: What was the state of play or the state of biodiversity in your country at the moment of the adoption of the Directives and/or your country's entry into the EU? To what extent is the current situation due to the EU nature legislation? In answering this question, please consider different objectives/measures set out in the Directives (eg regarding protected areas, species protection, research and knowledge, regulation of hunting, etc, including their transboundary aspects).

Answer:

In describing the "added value" effect of the Birds and Habitats Directives (BHD), our answer covers two aspects: 1) policy output and 2) environmental effects.

Policy output

The activities undertaken or financed by the government in order to implement the policy are referred to as the policy output.

Protected areas:

The establishment of a network of protected areas

Dutch nature conservation prior to the BHD was based on the Nature Policy Plan of 1989[80]. The main objective of this plan was to establish a National Ecological Network (NEN). Since then, substantial progress has been made in implementing this NEN. Later, parts of the NEN were designated as Natura 2000 sites. Almost all Natura 2000 areas are located in the NEN[81] . In this respect, the Dutch policy for the NEN network and the EU Natura 2000 policy reinforce each other.

The objectives of the NEN were - and still are - more broadly formulated than those of the BHD. The objectives of the NEN are not only formulated regarding biodiversity conservation, but also regarding such aspects as ecosystem services and recreation. In this respect, the development of the NEN has contributed to and will continue contributing to the broader objectives of the EU's biodiversity strategy.

The protection regime

The BHD has strengthened the nature conservation regime for the species and habitats under its protection. The NEN's protection regime is based mainly on the Dutch system of spatial planning and national[82] and provincial spatial plans and regulations ("verordeningen"). This regime designates the areas where existing nature and biodiversity values need to be preserved and new nature conservation needs to be developed. Any potential losses of area in this network must be compensated.

The BHD protection regime goes much further and is stricter than the general regime for the NEN, giving more protection to species and habitats. The main differences between the spatial protection of the NEN versus direct legal protection based on the BHD are that the spatial regime: (i) does not protect against existing use and current activities; and (ii) does not provide any framework for the assessment of external effects[83]. On the other hand, the spatial procedures take into account values, such as openness and tranquillity and are based on more integrated ecosystem protection[84]. Prior to Natura 2000, only a limited number of sites were legally protected. Due to the BHD and Natura 2000, a larger part of the NEN is now sheltered by the stricter protection regime. Under question S.3, we noted that the stricter protection regime could lead to problems for nature development as regional development objectives (see S.3).

Site management

No legally required system of nature management planning was in place prior to Natura 2000, although an ineffective facultative system did exist for legally protected "natural monuments" ("Natuurmonumenten")[85].

[80] Natuurbeleidsplan 1989
[81] Veen & Bouwma, 2005
[82] For plans at the national level, see f.e. the Nota Ruimte
[83] Kamphorst et al., 2011; Jager, 2014
[84] Spelregels EHS, 2007; Broekmeyer et al.,2002
[85] Natuurbeschermingsraad, 1994; MNP, 2000.

However, for government-owned nature conservation areas, management planning has been standard practice since the 1960s[86]. In practice, nature conservation organisations did have their own management planning systems in place. In addition, site management for nature objectives was part of the national policy for the NEN, subsidized by the national government after the decentralisation of nature policy by the provinces.
The major shift due to BHD was a move towards compulsory management planning for all areas (regardless of ownership) that must be undertaken in consultation with a broad range of stakeholders[87].
In 2013, the national government and the provinces agreed on a package of measures to develop nature conservation in the Netherland in upcoming years. The implementation of the site management plans and of the Integrated Approach to Nitrogen form the core of this package (See also questions S.1.2 and Y.1).

Based on the lower level of protection for the NEN (see also question Y.6), one can assume that the objectives for ensuring biodiversity through site protection and management could have been less strict and/or could have been met at a later date than with the existence of the BHD.

Species protection**:**
Legal protection of species was already underway prior to Natura 2000. Birds were protected under the 1936 Birds Act (*Vogelwet*) and other species were protected under the 1967 Nature Conservation Act (*Natuurbeschermingswet*). Even now, more species are protected at the national level than is required by the lists of species in the BHD annexes – although a significant number of the IUCN Red List species and species groups are not. (http://www.compendiumvoordeleefomgeving.nl/content/figuren/nl/1323_001g_clo_05_nl.jpg).
Active protection by specific species protection plans was initiated in 1984. Seven plans were developed, covering 55 species prior to the BHD. Since then, another 18 plans have been developed (covering 89 species under the Habitats Directive (HD) alone and 20 species that are not included in the HD)[88]. From 2006 on, a framework for active species protection was set up in the "habitat development plans" ("Leefgebiedplannen"). Although somewhat adapted, this approach will be continued in the new programme from 2016 on for agri-environmental measures. This programme is focused on the establishment and management of habitats of species protected under the BHD.
Following several high-profile court cases and an increasing number of legal actions, codes of conduct were developed in various sectors (13) or municipalities (21) in order to avoid conflicts due to ongoing activities and to ensure that activities undertaken would take account of legally protected species, including the BHD species (see also question Y.5).

Research and knowledge:
The BHD have contributed in various ways to the development of research and knowledge. In the field of knowledge, contributions have been made specifically with respect to distribution, sensitivity to disturbance and monitoring of habitat types (and to a lesser extent, species). For certain specific species, more research has been carried out in order to gather necessary information on their distribution. Moreover, access to information on the occurrence of species has been improved by the establishment of a specific authority for providing this information to stakeholders (GAN/NDFF). Scientific knowledge and access to information on site sensitivity and species sensitivity has also been improved (effect indicator Natura 2000 and effect indicator species) especially in relation to the impact of nitrogen[89].

Environmental effects
For the discussion on progress in implementing the BHD and the environmental effects, please see the answers to questions S.1, S.2 and S.3.

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[86] Buis, Verkaik et al. 1999.
[87] Beunen, 2010; Koole, 2014 .
[88] Natuurbalans, 2002; Compendium van de Leefomgeving
[89] Herstelstrategieen stikstof http://pas.natura 2000.nl/pages/herstelstrategieen-deel_i.aspx and water quantity/ quality (Kiwa & EGG (2006). Knelpunten- en kansenanalyse Natura 2000 gebieden. Versie juli 2006. Ministerie van Landbouw, Natuur en Voedselkwaliteit, Directie Natuur.

AV.2 - What would be the likely situation in case of there having been no EU nature legislation?

This question builds on question AV.1. In answering it, please consider the different objectives/measures set out in the Directives (eg. whether there would be a protected network such as that achieved by Natura 2000; whether the criteria used to identify the protected areas would be different, whether funding levels would be similar to current levels in the absence of the Nature Directives; the likelihood that international and regional commitments relating to nature conservation would have been met; the extent to which nature conservation would have been integrated into other policies and legislation, etc).

Answer:

This question has already been answered for the most part under question AV.1.

AV. 3 - Do the issues addressed by the Directives continue to require action at EU level?

When answering this question the main consideration is to demonstrate with evidence whether or not EU action is still required to tackle the problems addressed by the Directives. Do the identified needs or key problems faced by habitats and species in Europe require action at EU level?

Answer:

The conservation status of many species and habitat types is still a cause for concern (see questions S1.1, S1.2, S1.3). Although the decline has been halted, Article 17 reports for the Netherlands show that many species and habitat types still have an unfavourable conservation status. The information on biodiversity in the Netherlands, as measured in the NEN, also shows that the decline has stopped but that improvements are still quite minimal. The task of achieving European and national objectives still requires a large and long-term commitment.

Important factors in the poor conservation status of sites and species in the Netherlands have been influenced by EU policies in the field of agriculture, economic development and infrastructure. Moreover, new challenges, such as climate change, have prompted a need to reconsider nature protection strategies at the international, national and local levels[90]. Experience has also shown that stakeholders in border areas are confronted with different standards for nature protection, which influences the level playing field (see question C.6). A major goal of the EU activities is to promote international and cross-border cooperation. This is also important for Natura 2000, e.g. in order to harmonise implementation and improve ecological and environmental conditions on an international scale, such as in complete catchment areas.

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Annex 1: Objectives of the Directives

Overall objective	To contribute to ensuring biodiversity through conservation of Europe's most valuable and threatened habitats and species, especially within Natura 2000	
	Birds Directive	**Habitats Directive**
Strategic Objectives	Art. 2: Maintain the population of all species of naturally occurring wild birds in the EU at a level which corresponds in particular to ecological, scientific and cultural requirements, while taking account of economic and recreational requirements, or to adapt the population of these species to that level.	Art 2: Maintain or restore natural habitats and species of Community interest at a favourable conservation status (FCS), taking into account economic, social and cultural requirements and regional and local characteristics.
Specific Objectives	Art. 3: Preserve, maintain or re-establish a sufficient diversity and area of habitats' for birds, primarily by creating protected areas, managing habitats both inside and outside protected areas, re-establishing destroyed biotopes and creating new ones. Art. 5: Establish a general system of protection for all birds. Art. 7: Ensure hunting does not jeopardize conservation efforts and complies with the principles of wise use and ecologically balanced control of the species concerned.	Art 4: Establish Natura 2000 – a coherent network of special areas of conservation (SACs) hosting habitats listed in Annex I) and habitats of species listed in Annex II), sufficient to achieve their FCS across their natural range, and SPAs designated under the Birds Directive. Art. 6: Ensure SCIs and SACs are subject to site management and protection. Art 10: Maintain/develop major landscape features important for fauna and flora Art. 12-13: ensure strict protection of species listed in Annex IV. Art. 14: ensure the taking of species listed in Annex V is in accordance with the maintenance of FCS. Art. 22: Consider the desirability of reintroducing species listed in Annex IV that are native to their territory.
Measures/ Operations objectives	**Site Protection system** Art. 4: 4(1): Designate Special Protection Areas (SPAs) for threatened species listed in Annex I and for regularly occurring migratory species not listed in Annex I, with a particular attention to the protection of wetlands and particularly to wetlands of international importance. 4(3): Ensure that SPAs form a coherent whole. 4(4): [Obligations under Art 6(2), (3) and (4) of Habitats Directive replaced obligations under first sentence of 4(4)]. Outside SPAs, strive to avoid pollution or deterioration of habitats. **Species protection system** Art. 5 (a-e): Prohibit certain actions relating to the taking, killing and deliberate significant disturbance of wild birds, particularly during the breading and rearing periods. Art. 6: Prohibit the sale of wild birds except of species listed in Annex III/A and, subject to consultation with the Commission, those listed in Annex III/B.	**Site Protection system** Arts. 4 & 5: Select Sites of Community Importance (SCIs) and SACs, in relation to scientific criteria in Annex III. Art. 6(1): Establish necessary conservation measures for SACs. Art. 6(2): [Take appropriate steps to?]Avoid the deterioration of habitats and significant disturbance of species in Natura 2000 sites. **Plans or projects** Art. 6(3/4): Ensure, through an 'appropriate assessment' of all plans or projects likely to have a significant effect on a Natura 2000 site, that those adversely affecting the integrity of the site are prohibited unless there are imperative reasons of overriding public interest. Art. 6(4): When plans or projects adversely affecting the integrity of a site are nevertheless carried out for overriding reasons, ensure that all compensatory measures necessary are taken to ensure the overall coherence of Natura 2000. **Financing** Art. 8: Identify required financing to achieve favourable conservation status of priority

	Art. 7: Regulate hunting of species listed in Annex II and prohibit hunting in the breeding and rearing seasons and, in the case of migratory birds, on their return to breeding grounds. Art. 8: Prohibit the use of all means of large-scale or non-selective capture or killing of birds, or methods capable of causing the local disappearance of species, especially those listed in Annex IV. Art 9: Provide for a system of derogation from protection of species provisions under specified conditions **Research** Art. 10: Encourage research into relevant subjects, especially those listed in Annex V. **Non-native species** Art 11: Ensure introductions of non-native species do not prejudice local flora and fauna. **Reporting** Art 12: report each 3 years on implementation	habitats and species, for the Commission to review and adopt a framework of aid measures. **Landscape features** Art 10: Where necessary, encourage the management of landscape features to improve the ecological coherence of the Natura 2000 network. **Surveillance** Art. 11: Undertake surveillance of the conservation status of habitats and species of Community interest. **Species protection system** Art 12 & 13: Establish systems of strict protection for animal species and plant speces of Annex IV prohibiting specified activities. Art. 14: Take measures to ensure that taking/ exploitation Annex V species is compatible with their maintenance at FCS Art. 15: Prohibit indiscriminate means of capture/killing as listed in Annex VI. Art. 16: Provide for a system of derogation from protection of species provisions under specified conditions **Reporting** Art 17: report on implementation each 6 years, including on conservation measures for sites and results of surveillance. **Research** Art. 18: undertake research to support the objectives of the Directive. **Non-native species** Art. 22: ensure that introductions of non-native species do not prejudice native habitats and species.

Annex 2: Typology of cost and benefits

This annex sets out a typology of costs and benefits resulting from implementation of the Nature Directives in the EU, which need to be considered in the evaluation.

Typology of Costs

The evaluation will consider costs which result directly and indirectly from the Directives, including both monetary costs (i.e. involving direct investments and expenditures) and non-monetary costs (involving additional time inputs, permitting delays, uncertainty and missed opportunities).

It will include both the **compliance costs** of the legislation, and any **opportunity costs** resulting from missed or delayed opportunities for development or other activities. Compliance costs can be further divided into **administrative costs** and **costs of habitat and species management**. Examples of each of these types of costs are set out in Table 1.

Administrative costs refer to the costs of providing information, in its broadest sense (i.e. including costs of permitting, reporting, consultation and assessment). When considering administrative costs, an important distinction must be made between information that would be collected by businesses and citizens even in the absence of the legislation and information that would not be collected without the legal provisions. The costs induced by the latter are called **administrative burdens**.

Evidence of these costs will include:

- **Monetary estimates** of investments required and recurrent expenditures on equipment, materials, wages, fees and other goods and services; and
- **Non-monetary estimates** of administrative time inputs, delays, missed opportunities and other factors affecting costs.

Typology of benefits

The evaluation will collect evidence on the direct and indirect benefits derived from EU nature legislation, which include benefits for biodiversity and for the delivery of ecosystem services, and the resultant effects on human well-being and the economy.

The **ecosystem services** framework provides a structured framework for categorising, assessing, quantifying and valuing the benefits of natural environmental policies for people. However, it is also widely recognised that biodiversity has **intrinsic value** and that the Directives aim to protect habitats and species not just for their benefits to people, but because we have a moral duty to do so. In addition, consideration of benefits needs to take account of the **economic impacts** of implementation of the legislation, including effects on jobs and output resulting from management activities as well as the effects associated with ecosystem services (such as tourism).

A typology of benefits is given in Table 2. Assessment of the benefits of the Directives for biodiversity is a major element in the evaluation of their effectiveness. Effects on ecosystem services will be assessed in both:

- **Biophysical terms** – e.g. effects on flood risk, number of households provided with clean water, number of visitors to Natura 2000 sites etc.; and
- **Monetary terms** – e.g. reduced cost of water treatment and flood defences, value of recreational visits, willingness to pay for conservation benefits.

Evidence of economic impacts will include estimates of expenditures by visitors to Natura 2000 sites, employment in the creation and management of the Natura 2000 network, and resultant effects on gross value added in local and national economies.

Typology of costs resulting from the Nature Directives

Type of costs	Examples

<table>
<tr><td>Administrative costs</td><td>
Site designation, including scientific studies, administration, consultation etc.
Establishing and running of management bodies
Preparation and review of management plans
Public communication and consultation
Spatial planning
Development casework, including time and fees involved in applications, permitting and development casework affecting habitats and species, including conducting appropriate assessments
Time and fees involved in compliance with species protection measures, including derogations
Research
Investigations and enforcement
</td></tr>
<tr><td>Habitat and species management costs</td><td>Investment costs:
Land purchase
Compensation for development rights
Infrastructure for the improvement/restoration of habitat and species
Other infrastructure, e.g. for public access, interpretation works, observatories etc.
Recurrent costs - habitat and species management and monitoring:
Conservation management measures– maintenance and improvement of favourable conservation status for habitats and species
Implementation of management schemes and agreements with owners and managers of land or water
Annual compensation payments
Monitoring and surveillance
Maintenance of infrastructure for public access, interpretation etc.
Risk management (fire prevention and control, flooding etc.)
</td></tr>
<tr><td>Opportunity costs</td><td>
Foregone development opportunities resulting from site and species protection, including any potential effects on output and employment
Delays in development resulting from site and species protection, and any potential effects on output and employment
Restrictions on other activities (e.g. recreation, hunting) resulting from species and site protection measures
</td></tr>
</table>

Typology of Benefits

Type of benefit	Examples
Benefits for species and habitats	Extent and conservation status of **habitats** Population, range and conservation status of **species**
Ecosystem services	Effects of Directives on extent and value (using a range of physical and monetary indicators) of: • **Provisioning services** – food, fibre, energy, genetic resources, fresh water, medicines, and ornamental resources. • **Regulating services** – regulation of water quality and flows, climate, air quality, waste, erosion, natural hazards, pests and diseases, pollination. • **Cultural services** – recreation, tourism, education/ science, aesthetic, spiritual and existence values, cultural heritage and sense of place. • **Supporting services –** soil formation, nutrient cycling, and primary production.
Economic impacts	Effects of management and ecosystem service delivery on local and national economies, measured as far as possible in terms of: • **Employment** – including in one-off and recurring conservation management actions, as well as jobs provided by tourism and other ecosystem services (measured in full time equivalents); • **Expenditure** – including expenditures by visitors as well as money spent on conservation actions; • **Business revenues –** including effects on a range of land management, natural resource, local product and tourism businesses; • **Local and regional development** – including any effects on investment, regeneration and economic development; and • **Gross Value Added –** the additional wages, profits and rents resulting from the above.